

OLDFIELD, PATTINSON & CO.

Concentrated Infusions

Fluid Extracts.

Concentrated Decoctions.

Solid Extracts.

Concentrated Liquors.

Fruit Essences.

Concentrated Essences.

Inspissated Juices.

Concentrated Waters.

Soluble Essences.

Concentrated Extracts.

Extract of Herbs.

Coated Pills.

Composition Essence.

Malt Extract.

Vegetable Colours, &c.

DRUGS IN
ORIGINAL PACKAGES
AS IMPORTED.

SPECIAL TERMS
TO
LARGE BUYERS.

Inquiries should state quantities.

PRICE LIST WILL BE FORWARDED ON RECEIPT OF BUSINESS CARD.

MANUFACTURING CHEMISTS, WHOLESALE AND EXPORT DRUGGISTS, IMPORTERS of ESSENTIAL, OLIVE, and COD LIVER OILS.

SOLE PROPRIETORS AND MANUFACTURERS OF THE

"SILVER CHURN" DAIRY PREPARATIONS.

Butter Colouring.

GLASS BOTTLES ..	6d., 1/, 2/, 5/ Retail.
	4/, 8/, 16/, 38/ per dozen.
BULK	1/ per lb. 100/- cwt. in 2-gallon Bottles.
	90/- in 1-cwt. Kegs. 85/- in 3-cwt. Barrels.

Butter Powder
and Preserver.

BOXES	6d., 1/, 2/, 5/ Retail.
	4/, 8/, 16/, 38/ per dozen.
BULK	1/ per lb. 84/- cwt. in cwt. Kegs.

Essence of Rennet,
For Junkets, Curds and Whey,
Cheese Cakes, &c., &c.

GLASS BOTTLES ..	6d., 1/, 2/, 5/ Retail.
	4/, 8/, 16/, 38/ per dozen.
BULK	1/ per lb. 10d. in 2-gallon Bottles.

Liquid Annatto,
or Cheese Colouring.

STONE BOTTLES ..	6d., 1/, 2/, 5/ Retail.
	4/, 8/, 16/, 38/ per dozen.
BULK	1/ per lb. 10d. in 2-gallon Bottles.

Cheese Rennet,
OF
SPECIAL STRENGTH.

STONE BOTTLES ..	1-pints, 9d. Retail. 6/- doz.
	Pints, 1/3 " 10/- "
	Quarts, 2/ " 18/- "
	1/2-gall. 4/ " 34/- "
	1-gall. 8/ " 68/- "

BULK. At Special Prices. Inquiries should state quantity.

These Goods are selling well in the Agricultural districts. They are very attractively got up, are superior to any foreign makes, and are well worth the attention of the Trade, as they leave a good margin to the seller.

Attractive Show Cards and Printed Matter may be had on application.

17 TODD STREET, MANCHESTER.

"PEPSALIA."

PEPSALIA, it should be remembered, is a powerful digestive agent in the form of a condiment. It is not a mere condiment, but must be looked at in the light of a digestive preparation. It is necessary to insist on this fact, because complaints have been made as to the cost of PEPSALIA, *as compared with Ordinary Table Salt*, whereas it ought in fairness to be compared with the price of the usual remedies resorted to for the relief of dyspepsia and indigestion. It will thus be seen to be the least expensive, as well as the most efficient and agreeable, of the remedies for the prevention of indigestion.

Chemists, in supplying Pepsalia to their customers, will kindly draw their attention to these facts.

NOTICE.

The word "PEPSALIA" is G. & G. Stern's registered trade mark.

G. & G. Stern will be happy to supply Chemists with Samples of Pepsalia for distribution to medical men, also with Literature, Show-cards, &c.

Price 1s. and 2s. per Bottle. To Chemists, at 10s. and 20s. per Dozen, less 10 per cent. discount, for quantities of 1 dozen and upwards.

G. & G. STERN, 62 GRAY'S INN ROAD, LONDON, W.C.

LETCHFORD'S BUILDINGS, THREE COLT LANE,

BETHNAL GREEN, LONDON, E.,

December 5th, 1890.

TERMS OF SUPPLY.

THE SANITAS COMPANY (LIMITED) beg to give notice that in consequence of advances in the prices of bottles, materials, and labour, on and after January 1st, 1891, the Trade Rates of all their 6d. and 1s. preparations, now supplied at 4s. and 8s. per dozen, will be raised to 4s. 6d. and 9s. per dozen respectively, the rates of discount to retail and wholesale buyers remaining as heretofore.

C. T. KINGZETT,

Managing Director.

N.B.—Chemists and Druggists are requested to communicate with the Company if (1) they would like an Opal Show Tablet fixed on their shop window, or to be supplied in a frame; (2) if they require Show Cards, Pamphlets, Handbills, &c., naming a wholesale house for enclosure; or (3) if they issue a Retail Price List or Almanack, and would like the Company to advertise in some special position therein.

ENAMELLED IRON TABLETS for fixing on walls, &c., may also be had.

THE SANITAS COMPANY (LIMITED) are the Sole Manufacturers of the "Sanitas" Disinfectants, Toilet and Veterinary Preparations, "Sanitas" Oil for Inhalations and Fumigations, "Kingzett's Mercuric Bactericide" for use by Surgeons, and "Kingzett's Preserved Peroxide of Hydrogen" for Bleaching purposes, &c.

NEWBALL & MASON'S HYSON GREEN WORKS, NOTTINGHAM.

In consequence of the rapid development and extension of their business NEWBALL & MASON, Manufacturing Chemists and Botanic Druggists, of Nottingham, have removed from PARK ROW to the large and commodious premises known as HYSON GREEN WORKS.

The Works are particularly well adapted for the business, and present an imposing appearance, and in which the firm will doubtless find "ample room and verge enough" to develop their home and foreign business in any manner they may wish.

The main building has four splendid rooms, each nearly 125 feet in length, lofty, thoroughly clean, heated by steam, and well ventilated. They are also fitted with shafting and steam hoist from floor to floor for the transmission of goods, separate staircases at each end of the rooms being the means of saving much time in passing about.

The ground floor is used for packing the Extracts of Herbs, the Temperance Drinks, the Fruit Syrups, and the Wine Essences, to the manufacture of which the firm principally devote their attention. At the far end of the room lies the printing-office, where six persons are constantly employed in doing the rough printing for the firm. Four "Crockers" and two other machines are kept constantly at work.

The first floor is occupied by the Bottlers. In this place the compounds are not only bottled, but they pass through the various stages of being corked down, capsuled, wrapped up, and placed in the small boxes. Telephone No. 208 of the National Telephone Company (of the Nottingham section) is placed in this department; through it orders are received from Sheffield, Leeds, Bradford, and all other centres where the trunk lines of the Company have been completed.

As the firm's compounds cannot be made and despatched in a short time, large stocks have to be kept to supply daily orders; to meet this need the second and third floors are devoted to stock.

The building that adjoins contains two storeys. The ground floor is utilised for the reception and washing of bottles, which are sent on trucks through the packing-room up to the bottling-department by the steam hoist.

The storey above is fitted throughout with steam power, and contains a private laboratory and the small mills.

At the further end of the court is the grinding department, where tons of herbs are ground. It contains some mills, fitted up with all the latest improvements, drying-ovens, a row of coppers for evaporation by fire, and large stills. The place is kept clean and thoroughly ventilated.

On the other side of the court is the large Working Laboratory. It is over 100 feet in length, and is ventilated by Blackman's propellers. Here are in use drug-mills for powdering the herbs; a Carter's disintegrator for breaking up barks and roots; hydro-extractors and vacuum pans; as well as stills, evaporating-pans, and mashers.

The room above is the herb-room, where some tons of all kinds of roots, herbs, and barks are regularly kept in stock.

All the buildings are warmed by steam-pipes, and fitted up with electric bells connecting one department with another.

[See opposite page.]

A Copy of this Supplement is inserted in every number issued of "The Chemist & Druggist."

The Chemist and Druggist

SUPPLEMENT

Businesses Wanted.
Businesses for Disposal.
Premises to Let.
Auction Sales.

SATURDAY, DEC. 20, 1890.

Partnerships.
Situations Vacant.
Situations Wanted.
Miscellaneous.

ADVERTISEMENTS FOR SUPPLEMENT, DEC. 27,

Will, as usual, be received until the first post on Friday morning, December 26. We shall be obliged, however, if Advertisers will assist us by sending their Advertisements so as to reach us earlier in the week, and thus escape the postal crush of Christmas Day. Those who are in the habit of calling for the Supplement at the Office should on this occasion send us an addressed postal wrapper, and we shall forward copies by the earliest possible post on Friday.

The offices of THE CHEMIST AND DRUGGIST will be closed on December 25 and 26, and will be re-opened on Saturday. December 27.

CHEMISTS' TRANSFERS.

MESSRS. ORRIDGE & CO., 32 LUDGATE HILL, E.C. CHEMISTS' TRANSFER AGENTS,

May be consulted at their Offices on matters of SALE, PURCHASE, and VALUATION.

The business conducted by Messrs. ORRIDGE & Co. has been known as a Transfer Agency since the year 1846, and is well known to all the leading firms in the Trade. VENDORS have the advantage of obtaining an opinion on value derived from extensive experience, and are in most cases enabled to avoid an infinity of trouble by making a selection from a list of applicants for purchase, with the view of submitting confidential particulars to those alone who are most likely to possess business qualifications and adequate means for investment. PURCHASERS who desire early information regarding eligible opportunities for entering business will greatly facilitate their object by describing clearly the class of connection they wish to obtain.

1.—LONDON, W.—First class Dispensing Business, situated in a select neighbourhood; old established concern; returns £1,000 yearly; very handsomely-fitted shop and good stock; commodious house; full partition ars will be furnished in exchange for London reference; about £1,000 required.

2.—LONDON SUBURB, S.W.—Good-class Retail and Family Business; returns £500 yearly under manager; principal can easily double the returns; handsome shop, good house, and large garden; vendor having other engagements will accept very moderate terms.

3.—LONDON.—Thickly-populated locality; very old-established and genuine Family Business; open to the fullest investigation; returns nearly £950 yearly; well-fitted shop and good stock; convenient house; about £750 required.

4.—LONDON, N.—Old-established family Retail and Dispensing of good class; returns £500; well-fitted shop; good stock; six-roomed house, with garden; about £400 required; worth attention.

5.—LONDON (City).—Retail and Dispensing Business; good position for pushing Proprietary Medicines; returns nearly £600 yearly; single-fronted shop; large market neighbourhood; about £450 required.

6.—LONDON (near), S.W.—Old-established Business; Retail and Dispensing; returns about £800 yearly, *all profitable business*; house contains 8 rooms and shop, with garden and conservatory; terms, small premium and valuation of stock and fixtures.

7.—ESSEX (River Side).—Handsomely-fitted shop; Retail and Dispensing Business; returns over £600, increasing; very good house (corner), all in good condition; an immediate purchaser will be dealt with liberally.

Particulars of any of the above will be furnished on application.

N.B.—NO CHARGE TO PURCHASERS.

Other Businesses, Town and Country; particulars free on application. Personal applicants receive Messrs. O. & Co.'s direct attention and advice, where required, free.

TERMS FOR VALUATION ON APPLICATION. APPOINTMENTS BY POST OR WIRE HAVE IMMEDIATE ATTENTION.
Messrs. ORRIDGE & Co. invite communications from COLONIAL and FOREIGN firms where business of a confidential nature requires the especial attention of a London agent.

SPECIAL NOTICE.—TO PRINCIPALS AND ASSISTANTS.

MESSRS. ORRIDGE & Co. Register Vacancies for Situations FREE OF CHARGE.

ORRIDGE & CO., 32 Ludgate Hill, LONDON, E.C.

F. J. BRETT, VALUER, LEICESTER,

60 St. Stephen's Road.

References to principal London and Provincial Wholesale Houses, also to numerous clients throughout the United Kingdom.

BUSINESSES THOROUGHLY INVESTIGATED FOR BUYERS. 20 YEARS' EXPERIENCE.

LONDON, S.W.—Light Retail, in pleasant suburb; returns over £600, nearly one-half profit; also Post Office worth £70 per annum; good house; price £400.

STAFFS.—General Light Retail and Prescribing; net rent £24; good position; returns £900; vendor going abroad will accept £400, or reasonable offer.

YORKS.—Profitable Retail in good town; returns £1,050; lease; price £750.

KENT.—Retail, Dispensing, and Prescribing; no heavy trade; returns over £700; price £450.

£1,500 returns average for last 3 years; first-class Retail and Dispensing; due position of important Midland town; about 1,000 new prescriptions per annum; *patents and everything at full prices*; spacious house and premises; stock of the best quality, and in sound condition; at reduced prices returns could be doubled or trebled; price £1,200, about the value of stock and fixtures.

CARDIFF.—Retail, in good suburban position; returns, with only partial attention, £300; can be doubled; good house; lease at low rent; price £250.

BUSINESSES FOR DISPOSAL.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

£450.—An old-established Chemist's Business; small town near Newcastle-on-Tyne; returns £1,100; rent £34 yearly, six years' unexpired lease; strict investigation invited. Particulars apply, "Medicus," 44 Elswick Road, Newcastle-on-Tyne.

CHEMIST and Druggist's Business in the North of Scotland for immediate disposal; present proprietor giving up on account of health; good opening and capable of development. Particulars, "Northern," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO CHEMISTS AND DRUGGISTS.—For sale, as a going concern, at a valuation, an old-established Mixed Wholesale and Retail Business in a Lancashire manufacturing town of 25,000 inhabitants; turnover last 12 months, £707. Address, "Chemicus," c/o Rev. R. Large, Inoe, Wigan.

MIDLANDS. An old-established Light Retail and Prescribing Business; country town; good house and garden; returns over £300; owner going abroad; price £250, or valuation; satisfactory reasons for disposal. Address, "Fides," care of Southall Bros. & Barclay, Birmingham.

KENT.—Near town; good-class Retail and Dispensing Business, in a busy main road, returning £12 per week; very profitable, and increasing; satisfactory reasons for selling; price only £350, or a reasonable offer entertained. "Kent," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

SOUTHPORT.—A branch in leading thoroughfare; genuine Light Retail and Dispensing; returns have risen in 2 years from £250 to £450 under assistant; price £425; good lease; searching investigation allowed; perfectly satisfactory reasons for disposing. Apply, "Chemist," 15 Chapel Street, Southport.

SOUTH-WEST of England.—Old-established Retail and Dispensing Business in a medium-sized market town; returning £1,200; slight opposition; 10-roomed house, with garden; held by vendor many years; will be sold by valuation or otherwise; investigation allowed. Address, "Col," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

IN Lancashire, a Wholesale connection returning over £3,000 per annum, mostly in light goods and proprietary articles, and capable of great increase; full particulars to principals only, with not less than £1,800 at command. Address, giving references, to "Excelsior," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WARWICKSHIRE.—For immediate disposal, Retail and Dispensing Business in a very good-class locality; returns £500 per annum; full prices; convenient house, nice garden; low rent; same hands 24 years; retiring through illness; price £350 inclusive; introduction given. "Rhei," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

PRESCRIBING and Light Retail Chemist's Business in busy Birmingham suburb; returns £400, at fully half profit; good prices, no patents; unusually comfortable corner house; good opening for pushing man; can be immensely improved; price £300 everything; owner entering medical profession. Apply, Goodwin & Evans, 35 Cannon Street, Birmingham.

GENUINE little Pharmacy, on the main road, 4 miles from Cardiff and Barry, centre of lovely scenery, close to sea and docks, one minute from two stations; nearly £3 per week proof prescribing; no cutting or opposition; a large shipping trade may be cultivated; unlimited opportunity for a good Prescriber and Tooth Extractor; advertiser cannot pay required attention, having taken larger concern, courts every investigation. Pearson, Chemist, Caroline Street, Cardiff.

GENUINE old-established Mixed Drug Business; Staffordshire; good position; excellent premises; net profits £180; price £550; no Agents. 222/23, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

AND-old-established, well-fitted, well-stocked Shop in best position of small town; double-fronted, plate-glass; 6 rooms, large garden; rent and taxes £20; cash Retail trade; population over 3,000, unopposed; returns £400; introduction facilities; Midlands; price £250, or fair offer. 24/37, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

LANCASHIRE.—On Sale on most advantageous terms, Retail, Dispensing, and Prescribing Business; returns about £300; handsomely fitted shop; good house; good position in main street; satisfactory reasons for selling; price, valuation of stock and fixtures; part purchase money can remain if desired. Address, "Menthol," Lancashire Evening Post Office, Preston.

BUSINESSES WANTED.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, in London, West or South-west preferred, a good Retail and Dispensing Business, with house, in main road, returning about £1,000. Apply by letter, G. G. G., care of S. Maw, Son & Thompson, 11 Aldersgate Street.

£5 WILL be paid to any Chemist sending information (if acted upon) of an opening for a medical man to buy or start a Practice; southern or midland counties preferred; Chemist sending will have first offer of the dispensing. "Medicus," Hornby, Chemist, Richmond, Surrey.

PARTNERSHIPS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

PARTNER wanted, with £500, to further carry out Vollmer's patent powder for instantly stopping flow of blood; sure fortune can be made. Apply to Vollmer, 43 Southwold Road, Upper Clapton.

PARTNERSHIP.—Advertiser requires an energetic Partner in a Wholesale Manufacturing business in Yorkshire; £700 to £1,000 capital required for extension; a rare opening for a young man; strict investigation offered. Address, W., care of R. E. Bevan, Esq., Bulwell, Nottingham.

WANTED, a Chemist (or Wholesale Druggist) to join as active or sleeping Partner in opening up two businesses in large manufacturing town North; small capital required. Also a Prescribing Business for disposal; price £50; bona-fide. "Chemicus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

TO LET.

3s. 6d. for fifty words; 6d. for every 10 words beyond

TO Chemists.—A most exceptional opening exists in handsome double-fronted Shop, with large dwelling-house, adjoining Charlton Railway Station, S.E.R.; good residential locality; no chemist near; deserves special notice; rent £80. See or write "Owner," Cedar Lodge, Old Charlton.

CAPITAL Shop, with commodious dwelling-house, suitable for Chemist, to be let, at a very low rent; the premises occupy a good position in a high-class neighbourhood, facing a railway station. Apply to Messrs. Farebrother, Ellis, Clark & Co., 29 Fleet Street and 18 Old Broad Street, E.C.

GOOD Corner Shop, frontage to two streets; this is an exceptional opportunity for Chemist to establish a good trade, being in a very populous neighbourhood, no business of the kind being anywhere near; rent £28. For further particulars apply, H. C. Davies, 43 Holyhead Road, Handsworth, near Birmingham.

BIRMINGHAM.—First-class Shop and Dwelling-house, on a busy main thoroughfare, surrounded by a densely-populated neighbourhood and leading to the wealthy and fashionable suburb of Edgbaston; a Chemist has occupied the premises for 30 years; no fixtures, stock or goodwill to pay for; alterations made if required; rent £70; unusual opportunity. Apply immediately, Marriott's Estate Office, 21a Juge Street, Birmingham.

APPRENTICESHIP.

APPRENTICE required in a good-class Retail and Dispensing business. John Mills, Pharmaceutical Chemist, Eastgate Row, Chester.

TENDERS.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

ST. MARY'S HOSPITAL, W.

Contract for Drugs and Chemicals.

THE Governors are prepared to receive Tenders for the supply of Drugs and Chemicals for three months ending April 15th, 1891. Forms of Tender can be obtained at the Secretary's Office. Tenders must be delivered in sealed envelopes accompanied by samples, when an required, addressed to the undersigned, marked "Tender for Drgs," on or before Monday, the 22nd inst., at noon. The Governors do not bind themselves to accept the lowest or any Tender. (By order.)

16 December, 1890.

THOMAS RYAN, Secretary.

SITUATIONS OPEN.

3s. 6d. for fifty words; 6d. for every 10 words beyond.

WANTED, for January 10th, an Assistant, aged 20 to 24, indoors. Apply personally, or if by letter, with photo, B. Sanger, 489 Oxford Street, W.

WANTED, a Junior Assistant for the Retail counter (outdoors). Apply, giving full particulars, to D. P. Roberts, 120 North End, Croydon.

J. JOHNS & SON, of Southampton, are wanting, beginning of January, a Junior Assistant or an Improver; send carte and full particulars.

AT ONCE, Dispenser; indoors; cash business, N.W.; must be quick and experienced. Apply to J. H. Lewis, 22 and 24 Great Portland Street, W. Also vacancy for Junior.

WANTED, at once, Junior Assistant, about 18; must be active and of agreeable manners. Send full particulars as to salary, photo, and reference, to B. C., care of Raines & Co., Druggists, York.

AN Assistant (indoors) to manage suburban business for widow; salary £50 per annum, and commission. Reply, stating age, experience, qualification, to "Statim," 84 Lausanne Road, Hornsey, N.

EARLY in January.—An Assistant, qualified, for first-class Dispensing and Retail. Apply, stating full particulars as to age, height, and salary required, &c., to J. Beale, Pharmaceutical Chemist, Bournemouth.

WANTED, Junior Assistant, indoors, for Mixed Country business; easy hours, no Sunday duty; send photo, which shall be returned, state salary expected, and references, to R. H., 5 Norfolk Street, King's Lynn.

A COMPETENT Outdoor Assistant, by Jan. 1, for a good Retail and Dispensing business. Apply, stating age, height, experience, references, and salary required, to J. Williams, Pharmaceutical Chemist, Aldershot.

WANTED, a competent, industrious Assistant, accustomed to smart middle class business; must be pleasant to customers, and good stockkeeper. Apply, stating full particulars, to Geo. Daniel, Chemist, 630 Holloway Road, N.

WANTED, for second week in January, a competent Assistant accustomed to good Dispensing; aged about 26; qualified; indoors. Apply, with full particulars (enclose carte if convenient) to J. S. Burnett, Chemist, Bishopston, Bristol.

FOR South Africa.—Wanted, early in the spring, a smart, intelligent young man; abstainer; salary and interest in profits, with prospect of purchase on easy terms. Apply for particulars to Lorimer & Co., Britannia Row, London, N.

WELL-KNOWN Traveller and Perfumer requires an educated boy about 13, to travel through the country; hotel and all other expenses paid out of London; premium required. 18/26, Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

WANTED, Assistant, after Christmas, well up in Dispensing, Prescribing, and Extracting, for General Agricultural business; Junior kept; board in, but room found out of house; hours easy; good reference from last employer indispensable. Send portrait, with particulars, to Tomlinson, Chelmsford, Essex.

WANTED, January 15, a married Assistant, qualified. Competent Dispenser, for a good-class business; references must bear strictest investigation; to live at business house. Send age, height, and number of family and photo if possible, references and salary required, to J. Ward, 39 Eastgate Street, Gloucester.

ITALY.—Wanted, by January 1, 1891, an English Assistant, speaking French, to assist in the pharmacy of the undersigned, who offers board, lodging, and a small salary in return for services. This is a good opportunity for anyone who wishes to escape the rigours of the English winter. Apply to J. J. Aime, Bordighera, Italy.

JUNIOR, by January 1; comfortable home, and time for study. Send full particulars and photo to J. B. Fletcher, Chelmsford, Tipton.

TEMPORARY Assistant for the Christmas Holidays. Apply, personally, to J. H. Lewis, 22 and 24 Great Portland Street, W.

WANTED, at once, a Qualified Assistant for a month; one recently passed preferred. Salary required, outdoors, to J. J. Nicholson & Co., Chemists, Sunderland.

WANTED, a qualified Assistant to be at Branch or Principal establishment. Apply, stating age, salary required, and photo (indoors), E. C. Ashford, Chemist, Northampton.

JUNIOR (Welsh) for 3 to 6 months; used to a Mixed Country trade, including grocery. Full particulars, references and salary, to R. J. Roberts, 9 College Green, Town, Merthyr.

ASSISTANT, about 21 or 22, required immediately; qualification not necessary if good man of business. Apply, with usual particulars, or personally, to W. V. Wright, 25 Broadway, Hammersmith, W.

WANTED, by the middle of January, a Junior Assistant, qualified, with knowledge of Homoeopathy preferred. Apply, with usual particulars, enclosing carte, to J. Gibbs & Son, Chemists, Eastbourne.

WANTED, qualified Assistant, about 30; outdoors; manager Branch, Light Retail and Dispensing; enclose carte. State salary expected and give referees, to "Chemist," 4 Balliol Road, Bootle, Liverpool.

IMPROVER.—Wanted, immediately, a gentlemanly and well-educated young man as an Improver; one who has passed the Preliminary and an abstainer preferred. Address, G. J., 131 King's Road, Chelsea, S.W.

JANUARY 1st, competent Assistant, quick and reliable Dispenser, accustomed to good-class trade; good references indispensable; qualification by exam. not absolutely necessary; indoors. Apply personally, 12 Wigmore Street, London, W.

A RELIABLE and experienced Assistant (indoors) for a Country business; qualified preferred; good references indispensable. Apply with full particulars, enclosing photo, to J. C., care of Messrs. Wright, Layman & Umney, 50 Southwark Street, London, S.E.

WANTED, early in January, good Junior Assistant, for Mixed business; indoors; inexceptionable references required; good Counter-man and Dispenser; Protestant and abstainer preferred. State experience, age, height, and salary required, with photo (to be returned), to J. B., 32 Victoria Road, Widnes.

AFTER Christmas, an Assistant for a good-class country Retail and Dispensing business; must be accustomed to an Agricultural trade; age about 22; hours 8 to 7, 10 on Saturdays; duty two evenings weekly. Apply, with usual particulars, stating salary and enclosing carte, to J. L. Davies, Chemist, Hay, R.S.O.

WANTED, immediately, qualified Assistant for Mixed, working-class trade; outdoors; permanency; married preferred; comfortable situation; Thursday half-holiday; must be good Tooth Extractor and Prescriber; one that is not afraid of soiling his fingers. Send references and salary required, &c., to Cooper, Chemist, Stockport.

EARLY in January; indoors; accustomed to Country Retail; must be quick, accurate, and obliging; good references required, and steady habits indispensable; abstainer. Apply, stating age, height, salary required, experience, enclosing photo (to be returned), to James Lee, Chemist, Watford. Also a vacancy for an Apprentice.

QUALIFIED Assistant by January (indoors); good class Country business where there are kept; must be neat, quick, and obliging; a good Salesman, of gentlemanly address and appearance; one who can Extract Teeth and Prescribe well preferred; highest references indispensable. Full particulars, enclosing photo, to R. H. Groves, Pharmacist, Blandford.

TRAVELLER wanted by a firm of Druggists' Sundriesmen and Surgical Appliance manufacturers, early in January, for town and country; must have a sound and reliable connection; all applications will be reckoned strictly confidential. Address in first instance, with full particulars, to B. L. M., Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

A LEADING firm of Manufacturing Chemists in London have a vacancy in their works for a bright intelligent young fellow, not over 19, as Assistant Chemist; he will have an opportunity of becoming practically acquainted with manufacturing pharmacy, and must not be afraid of work. Address "Manus," Office of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.

STRAITS SETTLEMENTS.—Wanted, immediately, an energetic man, of good experience and not afraid of work, to act as Dispenser and General Manager in a small Wholesale business; if found suitable, a certain share might afterwards be arranged: P. & O. passage laid out for 2 years' engagement. Apply, by letter only, Fletcher, Fletcher & Stevenson, 21 Mincing Lane, London, E.C.

PILL-COATING.—An old-established London firm of Wholesale Druggists require the services of a man well up in the Pearl and Gelatine Coating of Pills; favourable terms will be made with a reliable applicant; a knowledge of the manufacture of Compressed Tablets will be a recommendation. Reply by letter, which will be treated as confidential, stating experience, age, and salary required, to If, Lywood Villa, Beaconsfield Road, New Southgate.

R. E. CHARLES. Chemist, Brecon, wants a Junior; about 20; hours from 8 to 8; no Sunday work. Write, stating age, height, experience, references, and salary required.

WANTED, early in January, a competent Dispenser, qualified, with experience in first-class dispensing; not under 23. Apply, B. John (late Davies & Hillier), 15 Old Bond Street, Bath.

JUNIOR Assistant, aged 19 to 21, wanted last week December: fair Counterman and Dispenser; hours light, with home comforts. Apply, stating experience, salary required, &c., to J. Scott, Bodmin, Cornwall.

WANTED, early in January, a qualified Assistant, from 21 to 23, of gentlemanly appearance, energetic business habits, able to Extract and Prescribe; to Manage small Branch; in or out doors. Apply, with photo, stating salary, experience, references, when at liberty, &c., to J. A., Chemist, 145 High Street, Sunderland.

SITUATIONS WANTED.

1s. for twelve words; 6d. for every six words beyond.

A Manager or Senior; aged 30. M. P. S., 19 Pepper Street, Chester.

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JUNIOR Dispenser (22); excellent references; time for reading preferred. "Assistant," 3 Methley Street, Kennington.

ASSISTANT; aged 28; good references; accustomed to manufacture of Mineral Waters. W. B., 109 High Street, Cheltenham.

ASSISTANT; outdoors; aged 24; height 6 feet; 8 years town and country experience; qualified. Lyne, 4 Thayer Street, W.

ASSISTANT; 7½ years' good experience; aged 23; disengaged Christmas. Apply, X. Y. Z., 31 Cavendish Place, Carlisle.

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LOCUM TENENS; excellent experience; disengaged January 2nd. "Locum," Trinity Square, Llandudno.

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AS Improver or Turnover Apprentice (indoors), within 15 or 20 minutes' ride of Wills', and time given to attend lectures; small premium paid for 1 year's term. Thompson, Chemist, Putney.

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OUR WEEKLY SUPPLEMENT.

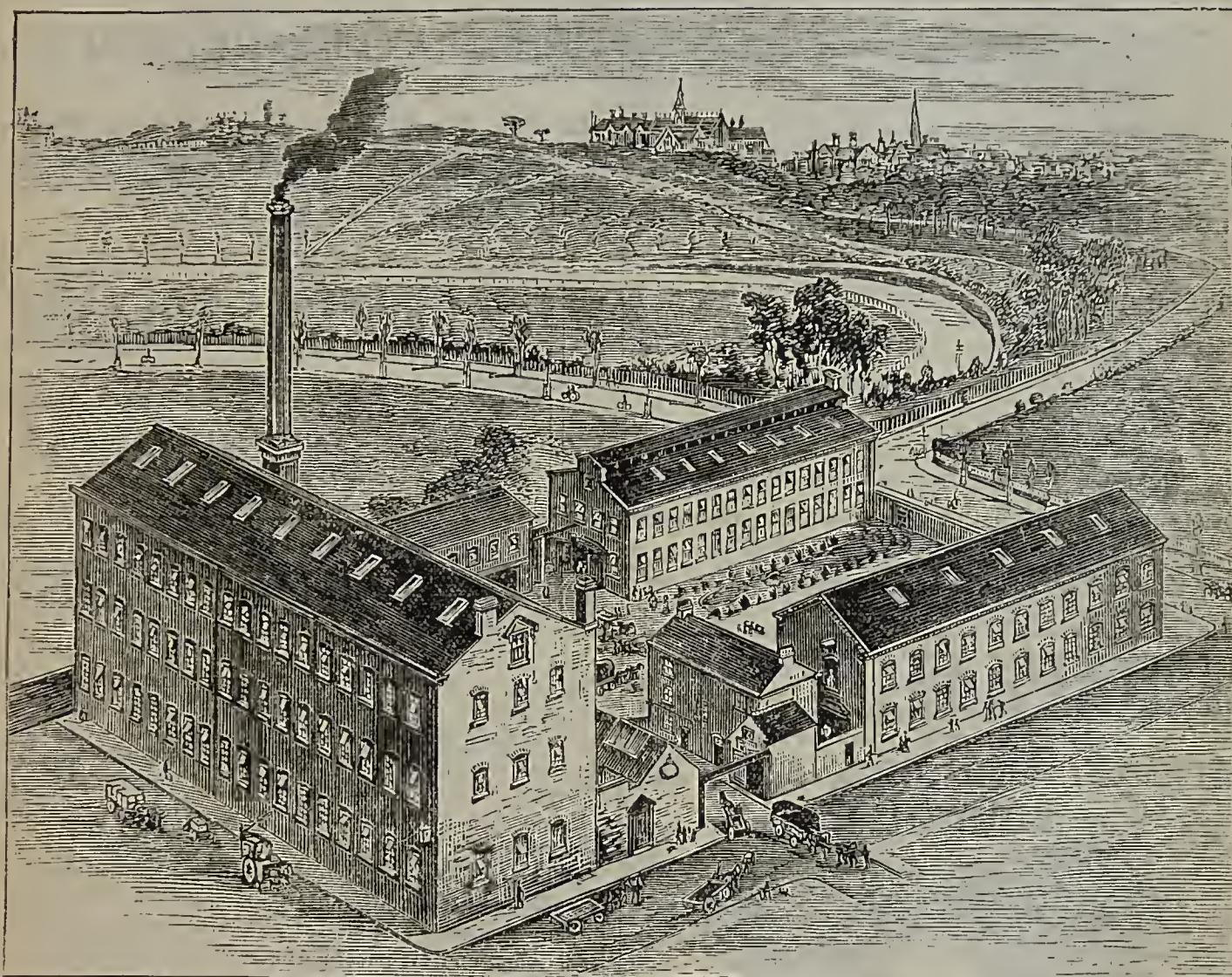
We have prepared a set of forms for small advertisements (assistants wanted, businesses for disposal, exchange column, &c.). With these are attached tables of useful reference matter (Sale of Poisons, Postal Information, Annual Licences, Metric Weights, Measures, Medicine Stamps, Law and Public Offices, &c.). We shall be glad to send one of these sets to any subscriber who will send us an addressed postal wrapper (bearing a halfpenny stamp). As the object of this production is to encourage the insertion of such advertisements as we have named in THE CHEMIST AND DRUGGIST, we hope this offer will be taken advantage of chiefly by those subscribers who are willing to use this journal whenever opportunities occur.

OFFICES: 42 CANNON STREET, LONDON, E.C.

DEC. 26, 1890.

THE CHEMIST AND DRUGGIST.
SUPPLEMENT

NOTICE OF REMOVAL



NEW PREMISES
OF
NEWBALL & MASON
HYSON GREEN WORKS,
NOTTINGHAM.

See opposite page.

ESTABLISHED 1842.

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Practical Pharmacy, Mr. JOSEPH INCE, F.C.S., &c.

FORTY-NINTH SESSION, 1890-91.

Application for admission to the School, for Prospectuses, or for further information or advice, may be made to the Dean, PROF. ATTFIELD, F.R.S., or to Professors or their Assistants in the Lecture Room or Laboratories, 17 Bloomsbury Square, London, W.C.

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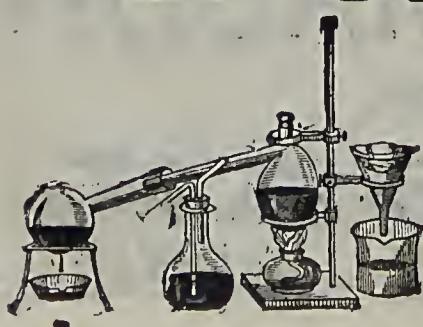
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Advertisements in this department must be paid for in advance. From this rule no deviation can be made. Insertions are charged at the rate of 1d. per word, provided the advertiser attaches his name and address, for each word of which he must also pay at the same rate; or if he pays 1d. per word, his name and address will be registered and a figure attached to his advertisement. All correspondence referring to that figure must be addressed to "The Publisher of THE CHEMIST AND DRUGGIST, 42 Cannon Street, E.C.", and the figure must be distinctly endorsed upon the envelope. Letters will then be forwarded to their proper destination. A price is counted as one word, as e.g., £1 10s. 6d.

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The Chemist and Druggist for January 5, '89.

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Microscopy, which, no doubt, will have an important future in Pharmacy, is in charge of a well-known Teacher. Another feature of the establishment is that “*Extras*” do not find place in its vocabulary.

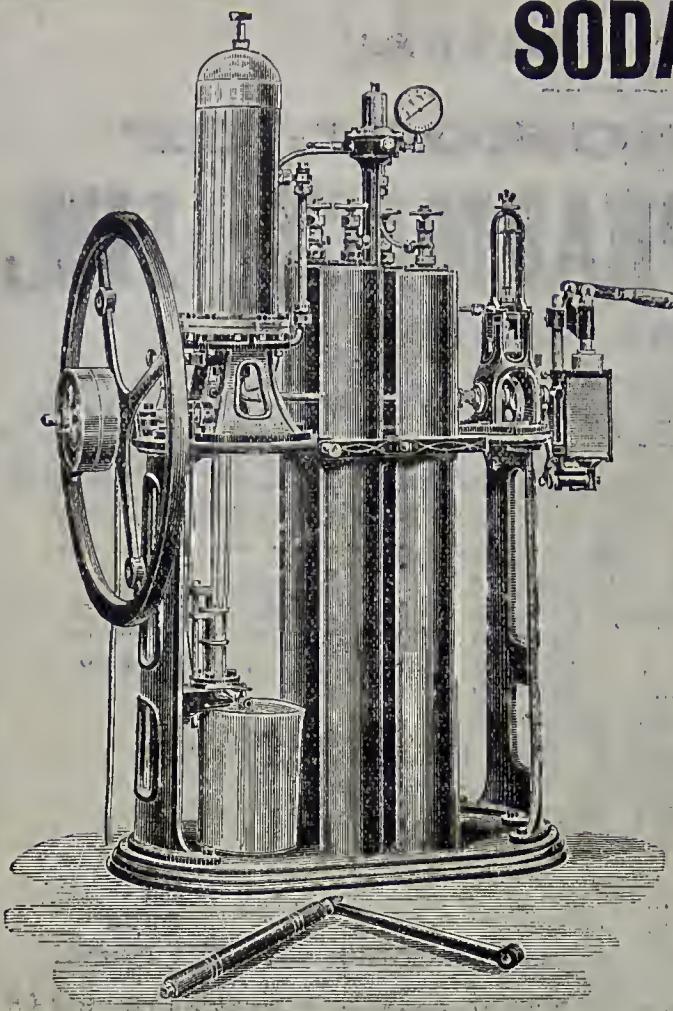
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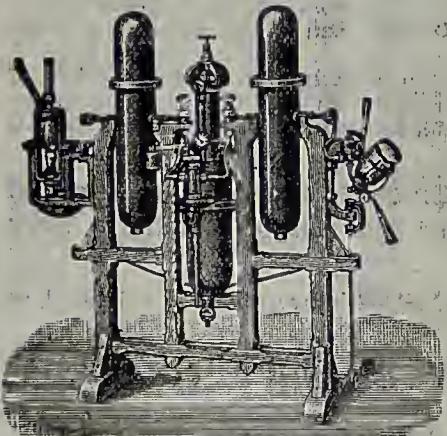
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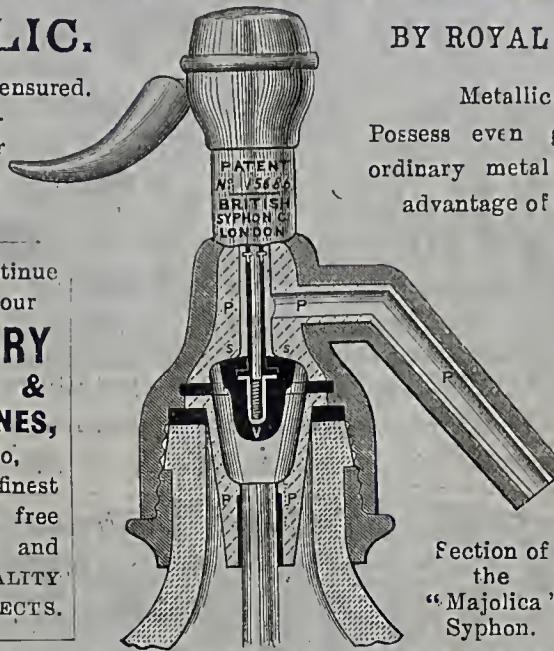
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Besides GOLD & SILVER Medals, these Essences have obtained the HIGHEST TESTIMONIALS from all the Medicinal Journals & from the Principal Trade Journals in this & other Countries.

HOP ALE AND GINGER ALE ESSENCES.

J. HAY, MANUFACTURING CHEMIST BEVERLEY RD., HUDDERSFIELD.

PRICE LISTS FREE ON APPLICATION.



PASCALL'S GOLDEN MALTEX

PATENTED.

Contains 25% of Allen & Hanburys' Extract of Malt.

A NOVEL CONFECTION. MOST SALEABLE.

Delicious Flavour. Brilliant & Attractive Appearance.

SELLS AT SIGHT.

Vide Dr. Tanner's Report, and *The Chemist and Druggist*, April 20th.

1/- Bottles, 9/- per dozen; 1-lb. Bottles, 20/- per dozen.

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OF ALL WHOLESALE HOUSES. OR OF THE MANUFACTURER,

JAS. PASCALL, BLACKFRIARS ROAD, LONDON, S.E.

READE BROTHERS'
PATENT

MALT & HYPOPHOSPHITE BISCUITS

A palatable and convenient mode of administering Malt and the Hypophosphites.

The Biscuits contain 75 per cent. of Malt Flour to 25 per cent. prepared Wheaten Flour, and each Biscuit contains half a grain of the combined Hypophosphites of Lime, Potass, and Soda, thus rendering it an admirable tonic and nutritive Food, eminently adapted for those cases in which Malt and the Hypophosphites are specially indicated.

In Tins, 1s. 6d. and 3s. each; Trade Price, 15s. and 30s. dozen,
From the Patent Medicine Houses, or from the Patentees and Manufacturers,

READE BROTHERS & CO., Pharmaceutical Laboratory, WOLVERHAMPTON.

NEW ESS. LEMON, ORANGE, ETC.

IT is with great pleasure that we have again the opportunity of addressing our numerous friends on the subject of **NEW ESSENCE OF LEMON.**

It is now two years since it was our privilege to inform the trade that we had started a factory in Messina, for the manufaeture of the above article. As we fully expeeted, our bold venture eaused our eompetitors, both here and elsewhere, to raise an opposition against us of a most bitter, unfair, and unscrupulous character. We venture to think that nothing could have been more satisfactory to ourselves that this opposition was raised, for, instead of doing us the injury that was intended, it has been the means of drawing the attention of buyers to our article, thereby causing a considerable number of Consumers with whom we had not hitherto done business to eonsider the advisability of trying our quality, with the result that they have found it, as we have so emphatically stated on previous oecasions, of **vast superiority over anything that has been shown on this or any other market.**

We can boast of a success in our "**W. J. B. SPECIALITY ESSENCE OF LEMON**" such as we did not dare to anticipate, our sales during the last season having far exceeded our ealculations. But the point upon which we are specially elated is, consumers are more and more becoming fully aequainted with its superiority, and those who have hitherto purchased the lower qualities from us and others, after due examination, are one by one being eonvined of its advantages and eonverted to its use. What then are its great qualifications? Simply that it is made earefully and well, from **SELECTED FRUIT ONLY AND ABSOLUTELY PURE.** Although somewhat higher in prie than the qualities usually ealled "the best," its greater strength makes it eheaper in use, imparting, at the same time, a far superior flavour.

With regard to the ordinary eommereial qualities, we claim also to be exceptionally placed ; being on the spot we are enabled to take advantage of favourable markets.

Finally, we wish to mention a few words on the prospeet of the erop, which, we regret, does not seem at all brilliant at present. Our friends will no doubt have seen, by our various market reports, the erop of lemons is now aseertained to be unusually limited, and the quality of the fruit being exceptionally good, a larger quantity than usual will be used for paeking. Therefore, in the absence of "refuse lemons," from which the ordinary Essenee is made, both Essenees and Lemon Juiee must be dearer as the season advances ; anything like a repetition of last year's figures is out of the question.

We have reeeived overland by Grande Vitesse a small copper, the first manufaetured this season at our works, Villaggio Gazzi, Messina, and the exceetional quality of the fruit this year will enable us to offer a **PERFECT ARTICLE.**

One of our partners is in Messina as usual, superintending the manufacture.

W. J. BUSH & CO.

ARTILLERY LANE, LONDON.

TO THE

**CHEMISTS & DRUGGISTS
OF
GREAT BRITAIN.**TELEGRAPHIC ADDRESS:
COLEMAN,
GEORGE'S, NORWICH.St. George's, Middle St
NORWICH,
December, 1887.

The Excise Authorities having created a difficulty as to the sale of Medicated Wine containing a certain percentage of alcohol, we obtained in January last, from the Inland Revenue Authorities, permission to sell our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine, **WITH QUININE**, without a Wine Licence, and many Chemists not holding a Wine Licence have sold considerable quantities. In order further to meet the requirements of the trade, we have introduced a Liebig's Extract of Meat and Malt Wine, **NON-Alcoholic**, made from the juice of the Grape, Liebig's Extract of Meat, and Extract of Malt. This also can be **SOLD WITHOUT A WINE LICENCE**. Your orders will oblige either direct or through the Wholesale Houses.

Yours obediently,

COLEMAN & CO., LIMITED.

*N.B.—The Wine is sold in Bottles, 2/9 and 4/6 each.
Trade prices on application.*

P.S.—Where the Magistrate's Certificate is not held we are willing to pay the entire cost of a Retail Certificate (the holder of which can sell any kind of Wines) if an assorted order of 6 dozen is sent us of any of our preparations. List on application. Our WINCARNIS,* or Liebig's Extract of Meat and Malt Wine **WITHOUT QUININE** commands a very large sale, and is recommended by over two thousand medical men who have sent us testimonials in its favour.

SOLE MANUFACTURERS—

COLEMAN & CO., LIMITED,ST. GEORGE'S, NORWICH,
AND 3 NEW LONDON STREET, LONDON, E.C.

* WINCARNIS is a NEW NAME, registered to prevent fraudulent imitations.

XMAS CHEER**DE CARLE'S
WINTER BEVERAGES**

Prepared from Fruit, combined with warm aromatics, making a delicious invigorating drink for the Festive Season, Evening Parties, Children's Gatherings, &c.

MAY BE USED WITH HOT OR COLD WATER.

Flavours—Clove, Peppermint, Ginger Punch, Ginger Lemon, Raspberry, Lemonade, Black Currant, Cherry Brandy, &c.

ONE PACKET MAKES 1½ PINT BY THE ADDITION OF SUGAR AND WATER.

Retail at **4½d.** each.

Good supply of Handbills sent with each order.

Order a 3-dozen Case, which we will send Carriage Paid for 10/-

DE CARLE & SON

Manufacturing Chemists,

NORWICH.

Sole Manufacturers of

DE CARLE'S SOLID FRUIT JUICES.

Natural arsenious and
Gubers Spring
ferruginous
Mineral-water.
SREBRENICA in Bosnia.

Will be found of great value in the treatment of
Anaemia, Chlorosis, Intermittent fever,
Malaria, Diseases of the Nerves, &c.

Easily to digest.

HENRY MATTONI, VIENNA.

Write for pamphlets and particulars to
W. BEST & SONS,
22, Henrietta street, Cavendish square,
LONDON, W.

To be had of all Chemists and Druggists.

Clarke's Newly Designed "Pyramid" Nursery Lamp Food Warmer, with New Registered Pannikin.



N.B.—NO ALTERATION IN THE PRICE OF THE OLD PATTERN "PYRAMID" FOOD WARMER.

CLARKE'S IMPROVED PANNIKINS (REGISTERED) FOR USE WITH CLARKE'S "PYRAMID" NURSERY LAMP.

By this invention any liquid food can be poured out, or drunk, without serum or grease passing through the spout, and prevents spilling when poured into Feeding Bottle, so objectionable with all other Pannikins. These Pannikins will fit all the old "Pyramid" Nursery Lamps, and can be purchased separately.

WHOLE-ALe PRICES { No 1 ... 30/- per dozen
LAMPS COMPLETE { " 2 ... 33/- " " 3 ... 38/- " } Cash discount, 5 per cent.

N.B.—Extras.—Porcelain Pannikins per dozen, No. 1 ... 6/- ... Lids ... 2/-
" " " " 2/- " 2/-
" " " " 3/- " 3/-

Tin Pannikins, No. 1, 8/- ... No. 2, 10/- ... No. 3, 12/-

Clear Glasses, 4/- ... Roughed, 8/- ... Opaline, 6/- ... Coloured, 6/- ... Ruby, 8/-.
N.B.—Ask for CLARKE'S PANNIKIN, add see that his name and the registered number

(Registered 91,241) is on the Pannikin, and trade mark "PYRAMID".

Clarke's Patent "PYRAMID" NIGHT LIGHTS are the only Lights suitable for these Lamps.
Sold Retail by all respectable dealers, and Wholesale by CLARKE'S "PYRAMID" AND "FAIRY" LIGHT COMPANY, LIMITED, CRICKLEWOOD, LONDON, N.W.
London Show Rooms—31 ELY PLACE, HOLBORN CIRCUS, E.C.

CLARKE'S ADJUSTABLE BED-TRAY (COUSINS') (PATENT)

FOR INFANTS AND INVALIDS.

For use with CLARKE'S "PYRAMID" NURSERY LAMP FOOD WARMER
with his NEW REGISTERED PANNIKIN.

This is an invaluable Invention, and useful appliance at the Bedside, suitable for Invalids, and particularly for Parents who Infants require Feeding during the night. It obviates the necessity of getting out of bed, as everything required for use can be put on the TRAY. The Tray is adapted for use in connection with Clarke's "Pyramid" Food Warmer, and when not required can be turned to the wall in such a manner as to shade the Person in Bed from the Rays of the night.

Invalids will find it Great Comfort, for any book, plate, basin, &c., can be placed thereon ready for use, and obtained without altering the position in bed. By means of a Slide, the Tray can be pulled forward to the position or length required. It is Highly Recommended by the Medical Profession, and can be obtained from most dealers in Clarke's "Pyramid" and "Fairy" Lamps.

Tray 15/-, with Book Rest and Medicine Box, 21/-, less 33/- per cent.

Food Warmer, see above.

With Brass Bracket, 4/- extra. Adjustable Brass Support for book rest, 5s. extra.

DIRECTIONS FOR FIXING.—Place the Clips round the bed-post, insert the Thumbscrew in the square hole at the end of same, and screw as tightly as possible. The Clips being of spring steel, they will fit any size post. A little cloth or washleather should be placed round the bed-post to prevent scratching the post.

CLARKE'S "Pyramid" and "Fairy" Light Co., Limited, CRICKLEWOOD, LONDON, N.W.

SHOW ROOMS—31 ELY PLACE, HOLBORN CIRCUS.

And at 484 COLLIN STREET, MELBOURNE.



THE FIRST RAW FOOD EXTRACT.

(Introduced to the Medical Profession in 1878.)

AN IDEAL FOOD.
PALATABLE.
KEEPS
PERFECTLY.



BOVININE
A RAW FOOD EXTRACT.

CONTAINING
20 PER CENT.
OF
COAGULABLE
ALBUMEN.

THE VITAL PRINCIPLES OF BEEF CONCENTRATED.

BOVININE consists of the juices of lean raw beef obtained by a mechanical process, neither heat nor acid being used in its preparation. The nutritious elements of lean raw beef are thus presented in a concentrated solution, no disintegration or destruction of the albumen having taken place. The proteins in solution amount to twenty per cent. of the weight of the preparation, and give to it the great dietetic value it possesses in all conditions where a concentrated and readily assimilable food is needed.

BOVININE is entirely distinct from the numberless meat preparations prepared with heat. It is a Food, pure and simple, Highly Concentrated, and the most Nutritious yet presented.

TO CHEMISTS AND DRUGGISTS.

BOVININE has been prescribed and enthusiastically endorsed by thousands of Physicians and Surgeons in the United States and Canada for the past Twelve Years. We are systematically introducing **BOVININE** to the notice of the Medical Profession of Great Britain, and many are prescribing it daily. It is sold at prices within the reach of all.

In Bottles, 12 oz. (4s. 6d. size), 38s. per dozen; 6 oz. (2s. 9d. size), 24s. per dozen.

TO BE HAD OF ALL WHOLESALE DRUGGISTS.

The Trade supplied in Ireland by R. SIMPSON & CO., 16 Henry St., Dublin.

THE J. P. BUSH MANUFACTURING CO.

Laboratory at Chicago, Illinois. Principal Office, 2 Barclay Street, New York, U.S.A.
DEPOT FOR GREAT BRITAIN - 32 SNOW HILL, LONDON, E.C.

CONCENTRATED**PEPTONISED COCOA & MILK**

AND CONCENTRATED.

PEPTONISED MILK**(PATENT).**

These two preparations are made with pure rich PRE-DIGESTED Country Milk, and, by mere dilution with hot water, afford a delicious restorative beverage the assimilation of which requires no digestive effort.

**SAVORY & MOORE
LONDON.**

Tins Is. 6d. and 2s. 6d. Obtainable Everywhere.

TRADE MARK.



THE LANCET:—"About one-third of the whole dry matter consists of true peptone, and another third of albumose. A variety of albumen uncoagulated by heat."—July 12th, 1890.

VIENNA POLIKLINIK:—"Your preparations . . . have proved excellent means of nutrition, and for strengthening individuals of great weakness and poverty of blood."—Prof. SCHNITZLER, Sept. 19th, 1890.

ENAEYER'S LIQUID STERILISED PEPTONE OF MEAT.

Considerably more nutritive than beef, and more palatable than home-made beef-tea; elegant in appearance. No digestive function need, or can, be exercised, all having been fitted for immediate absorption. Life can be supported indefinitely upon it, and it does not clog upon the most fastidious and delicate palate. It contains all the stimulative extractives and the mineral salts in due proportion, as they exist in beef. 2s. per bottle, ready for use.

LIQUID PEPTONATE OF IRON (Denaeeyer), 1s. 6d. per bottle, guaranteed to contain 10 per cent. of the salt in solution, equal to 3·30 per cent. of the metal.

PULVIS FERRI PEPTONATIS (Denaeeyer), 4s. per ounce bottle, a beautiful reddish-grey powder, soluble in water, compatible with all alkaline or neutral medicines.

TRUE PEPTONATE OF IRON is the produce of our laboratory alone, and is our discovery. The salt is precipitated from its solution in presence of the acid gastric juice, redissolved and absorbed with great rapidity in the alkaline medium met with in the duodenum, so that it does not interfere with digestion, and it is not chemically altered by the juices of the alimentary canal. Should be administered before meals, and its flavour requires no disguise.

PAMPHLETS AND SAMPLES FREE TO MEDICAL MEN.

Wholesale General Agents—Edinburgh: DUNCAN, FLOCKHART & CO. Glasgow: OLD APOTHECARIES' COMPANY (Limited). Dublin: HAMILTON, LONG & COMPANY (Limited).

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TOWER TEA OBTAINED THE HIGHEST AWARD FOR TEA AT THE PARIS EXHIBITION.



PRIZE MEDAL, PARIS, 1889.

To avoid imposition see that the trade marks (a Tower, with the word "Strength" across it, and "Tower Tea") are on every package, without which none is genuine.

WHERE VACANCIES EXIST AGENTS ARE
APPOINTED BY



PRIZE MEDAL, PARIS, 1889.

THE GREAT TOWER STREET TEA CO., LIMITED
5 JEWRY STREET, LONDON, E.C.

EIGHT PRIZE MEDALS AWARDED

GOODALL'S HOUSEHOLD SPECIALITIES.

YORKSHIRE RELISH.

Most Delicious Sauce in the World. Bottles, 6d., 1s., and 2s. each.

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The Best in the World. 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

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One 6d. Tin is equal to 25 eggs. In 1d. Packets; 6d., 1s., 2s. and 5s. Tins.

GOODALL'S CUSTARD POWDER.

Delicious Custards without Eggs. In Boxes, 2s., 6d., and 1s. each.

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Delicious Blanmange in a Few Minutes. Boxes, 6d. and 1s. each.

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Best Tonic yet Introduced. Bottles, 6d., 1s. and 2s. each.

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Makes the Best Ginger-Beer. Packets, 3d. and 6d.

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For Painting Stoves, Grates, Iron, Tin, &c. 6d. and 1s. Bottles.

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A Rich and Lasting Perfume. Bottles, 1s., 2s., and 5s. each.

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GOODALL'S JELLY SQUARES.

Make a Delicious and Nutritious Jelly. In ½-pint, 1-pint, and Quart boxes, 3d., 6d., and 1s. each.

PROPRIETORS—GOODALL, BACKHOUSE & CO., LEEDS

PATENT MEDICINES AND DRUGGISTS' SUNDRIES.

Monthly Price List of Patent Medicines, Druggists' Sundries &c., will be sent post free on application to

GOODALL, BACKHOUSE & CO., LEEDS

SPECIAL LINE FOR NEW YEAR.

FACSIMILE OF TIN.

HERBAL DROPS.

—o—
THREE OUNCE TIN.
—o—

FIRST MADE IN 1870.

Name and Address of Agent.

One to be taken several times a day, and immediately on retiring to rest. For a Child five years of age half a drop is sufficient.

PACKAGERS OF TINS.

Chemists wishing to push their own name will find this package very suitable. Will be ready first week in New Year.

Can be had through Wholesalers.

The name and address sent must be printed, to avoid mistakes; will be ready for delivery within a week of receipt of order.

In Gross Parcels only, 26/-.

JAS. PASCALL, MANUFACTURING CONFECTIONER

VALENTINE PLACE,
Blackfriars Road, LONDON.

GEO. MASON & CO.'S ESSENCE OF BEEF.

HOSPITAL FOR CONSUMPTION, BROMPTON.

Order No. 1090.
Please supply 120 tins Mason's Essence of Beef as before."



"Please send at once 2 Boxes Mason's Essence of Beef."

ST. MARY'S HOSPITAL, PADDINGTON.
Order No. 902.

TRADE MARK.

"O.K." BOUILLON.

The "O.K." Bouillon is the best and cheapest Beef Tea ever put before the public. It is made in England from British Beef. It can be sold as low as 6d. per tin.

CONCENTRATED BEEF TEA, MEAT LOZENGES.

MASON'S MALTED FOOD FOR INFANTS.

PRICE LISTS POST FREE.

417 & 419 Kings Road, Chelsea, London, S.W.

COMPARE, AND THEN DECIDE.

5/6 per Gross.



BOTTLE SHAPE.



BOTTLE SHAPE.

MEXICO COVES.

5/6 per Gross.

On $\frac{1}{4}$ -Gross Show Cards, with Elastic. Sample Free.

PETER TYRER, 70 LONG LANE, BOROUGH, LONDON, S.E.

“MYRTLE GROVE” TOBACCO

In 1-oz., 2-oz., and 4-oz. Packets, and $\frac{1}{2}$, $\frac{1}{4}$, 1 lb. Tins only.



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ESTABLISHED 150 YEARS,

SNUFF, TOBACCO, AND SEGAR MANUFACTURERS.

Write for List of Specialities.

THE ONLY PALATABLE NATURAL APERIENT WATER IS

“FRANZ JOSEF”

Write for pamphlet and particulars to the Sole Importers—THE “FRANZ JOSEPH” COMPANY, 101 Leadenhall Street.

“RAMORNIE.”

LIEBIG'S Extract of Meat.

As supplied to the Admiralty, War, and India Offices.

1-lb. Jars.....	per lb. 6/9	per doz. 81/0 | 2-oz. Jars.....	per lb. 7/8	per doz. 11/6
4-lb. Jars.....	7/0	42/0 | 1-oz. Jars.....	8/4	6/8
1-lb. Jars.....	7/8	21/8 | $\frac{1}{2}$ -oz. Jars.....	8/8	3/8

QUOTATIONS FOR EXTRACT IN “BULK” ON APPLICATION.

Write for Detailed Price List to the Australian Meat Co., 9 and 11 Fenchurch Avenue, E.C.

6 lbs. Carriage free.

CAFFYN'S LIQUOR CARNIS: ITS MANUFACTURE AND PROPERTIES.

"THE BRITISH AND COLONIAL DRUGGIST" SAYS:

When a medicine or an article of diet has fairly established itself, and its name has become a household word, it is natural enough that a good deal of curiosity should be felt as to the manner in which it is made. To satisfy this curiosity in so far as the preparation known as "Caffyn's Liquor Carnis" is concerned, we applied to Mr. Shepperson, the managing director of the Liquor Carnis Company, to furnish us with any recent particulars about the liquor and with permission to visit the works at Deptford.

The visitor is struck first by the evidences of great cleanliness which are traceable on every hand and in every department, and next with the simplicity of the process by which the liquor is produced. The meat used is carefully selected, and consists only of the choicest parts of the best British-fed cattle. No foreign-bred animals are used, and, of course, every precaution is taken to prevent the possibility of any of the meat treated being obtained from other than perfectly sound beast.

The meat having been cut up is placed on metallic trays and transferred to the hydraulic press. This apparatus is specially constructed with arrangements for preventing the access of flies and the like insects, and for keeping down the temperature in summer by means of ice.

Under a pressure of some 400 tons the meat-juices are rapidly forced out of the material fed into the press; running along the channels provided in the machine the liquid passes into the receiver in the lower part. From the receiver it is filled into glass carboys, which, carefully stoppered to prevent the access of germs, are placed on shelves in the same room.

It is self-evident that this liquid must be exceedingly rich in nitrogenous compounds; in order to make it a perfect food it requires the addition of carbon of course, in an assimilable form. After considerable research a carbo-hydrate was found, which not only perfectly answers this purpose, but also acts as a permanent preservative. This addition having been made the liquor is practically ready for bottling; it is syphoned off into the bottles, which are corked by machinery, capsuled, labelled, and packed in cardboard cases in an adjoining room.

Consideration of the mode of manufacture above described renders it clear that the Liquor Carnis consists of the juice of the finest beef containing unaltered all the liquid or soluble constituents. So rich is the preparation in soluble albuminoids that when heated it becomes a semi-solid jelly. Besides the albumen, fat, and other organic components of meat, the liquor also contains the phosphates, lime, magnesia, and alkalies in good proportion.

Not only may the visitor see the Liquor Carnis in process of manufacture, but at the same time can learn much that is

interesting about the properties and uses of the preparation. He will be reminded how experiment has demonstrated the physiological difference between egg and serum albumen; the former, when introduced into the circulation, is eliminated by the kidneys unchanged, but the latter under similar circumstances is not so excreted. The class of compounds which go to form animal muscle are chiefly myo-globulin (globulin and Greek "mys," muscle) and myosin with myo-albumen, which is similar to serum albumen.

These proteids coagulate between 56° C. and 65° C., forming a minutely flocculent precipitate, about which some amount of misconception seems to exist. The comparatively low temperature at which the albumen, &c., are thrown out of solution has led to an impression that the Liquor cannot be advantageously taken with hot water. The association of the word coagulation with the pronounced changes which take place in egg albumen at the temperature of boiling water is, no doubt, largely answerable for this impression, but, as a matter of fact, the precipitated albuminoids from Liquor Carnis are in a condition of such minute subdivision that they are readily and rapidly converted by the digestive ferments into alhumose and highly diffusible peptones.

Extracted by a cold process and containing unchanged all the constituents of the meat (with the exception of the insoluble and innutritious fibrin and the like), Caffyn's Liquor is both a restorative or stimulant, and a real food supplying the organism with the elements necessary to the building-up of the tissues, and further supplying them in the most readily assimilable form. The considerations based upon theory have been amply confirmed by the conclusions of practical

experience of the preparation in the hands of well-known medical men. Caffyn's Liquor Carnis has rather a marked sweetness, which some consider as a minor disadvantage, but this, we learn, is not only a matter of taste (others thinking the reverse), but also it may be easily remedied by mixing the liquor with any rational vehicle in the nature of food or drink. It has already been shown that it may be mixed with hot liquids without detriment, so that the invalid may take it simply diluted with hot cocoa and coffee or mixed with alcohol, wine, farinaceous foods, soups, &c. Before addition to spirituous liquids it should be diluted with water.

We may conclude this brief description of the Liquor Carnis Caffyn, by adding that the manufacturers possess a large volume of medical reports and opinions from the Press and from individual physicians and practitioners, showing that the preparation is of great value in the treatment of anaemia, digestive troubles, in typhoid, and in all conditions of impaired nutrition.



Retail—Three-ounce Bottle, 2s.; Six-ounce, 8s. 6d.

Pharmacists willing to distribute specimen bottles and literature to Medical Men will oblige by intimating the same to us and sending List of Medicos, with Addresses.

THE LIQUOR CARNIS CO., LTD.

50 HOLBORN VIADUCT, LONDON, E.C.

Telephone Number, 1852.
ADVERTISERS' AND BUYERS' REFERENCE LIST AND INDEX TO ADVERTISEMENTS.

Telegraphic Address—CHEMIOUS LONDON.

ADVERTISEMENTS APPEARING IN THIS ISSUE OF "THE CHEMIST AND DRUGGIST."

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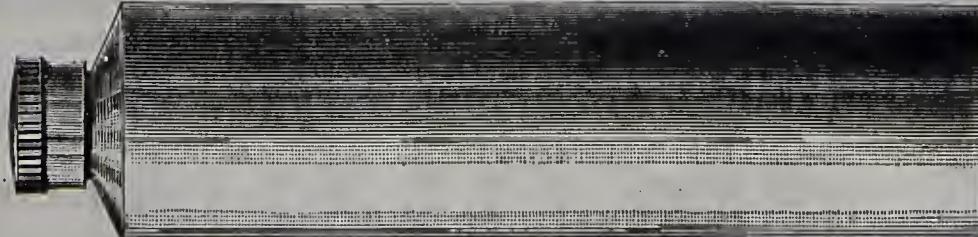
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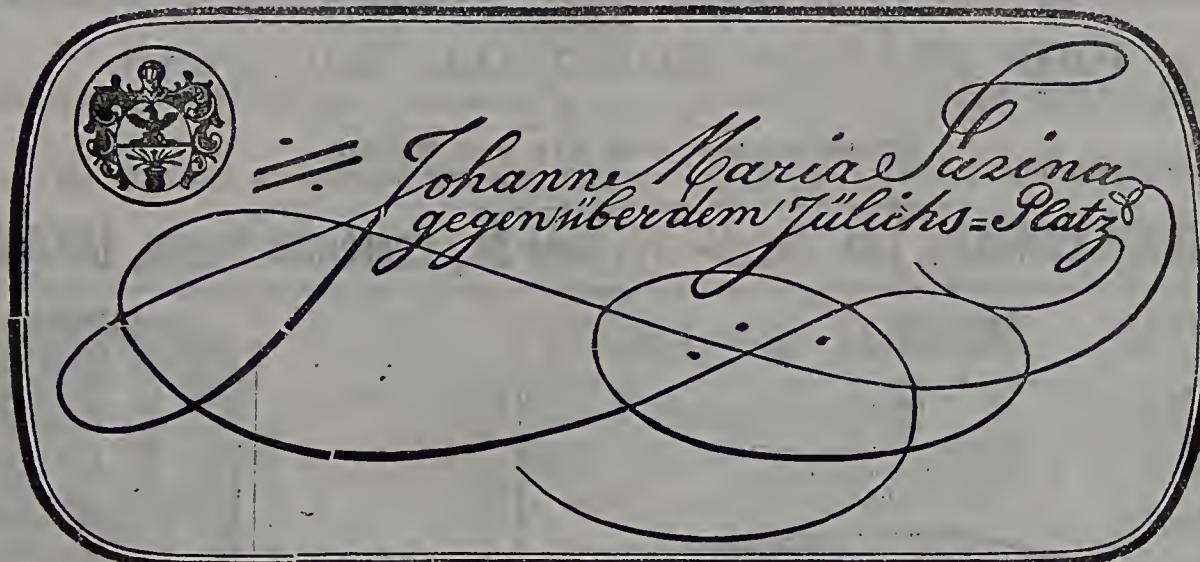
By appointment, Sole Purveyor to Her Most Gracious Majesty Victoria, Queen of Great Britain & Ireland; Their Royal Highnesses the Prince and Princess of Wales; Albert II., King of Saxony;



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FOR THE TREATMENT AND CURE OF ALL

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Claims to be a Specific for all Congestive and Inflammatory conditions of the Respiratory Apparatus, and will be found efficacious in

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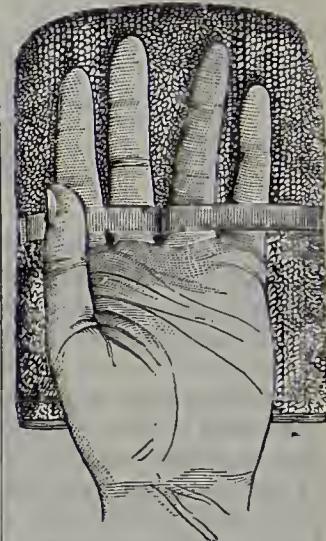
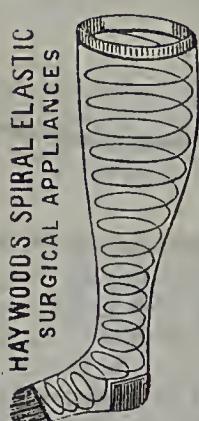
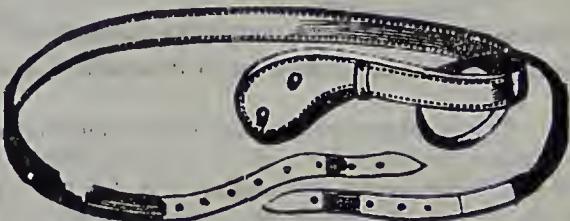
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WE will give to each Chemist who sends us an order for a minimum quantity of £2 worth of our "VINOLIA" Preparations, one of our new "**Vinolia**" Trial Specimen Cards, lettered in silver, and containing half-a-dozen trial specimens of Toilet Soap, half-a-dozen trial specimens of Balsamic Soap, and the same number of "Vinolia" Powder. These will be an ornament to any Chemist's counter, as well as a great attraction, and will, moreover, be found to materially increase the retailer's business in our preparations. The fact that the Chemist can let his customers have these trial specimens will please them extremely, and lead to opening up new business.

The gift is a substantial one, and further sets of samples can be obtained at the following prices :—

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POWDER ,,, 2/- ,,, } each respectively.

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SEASON 1890-1.



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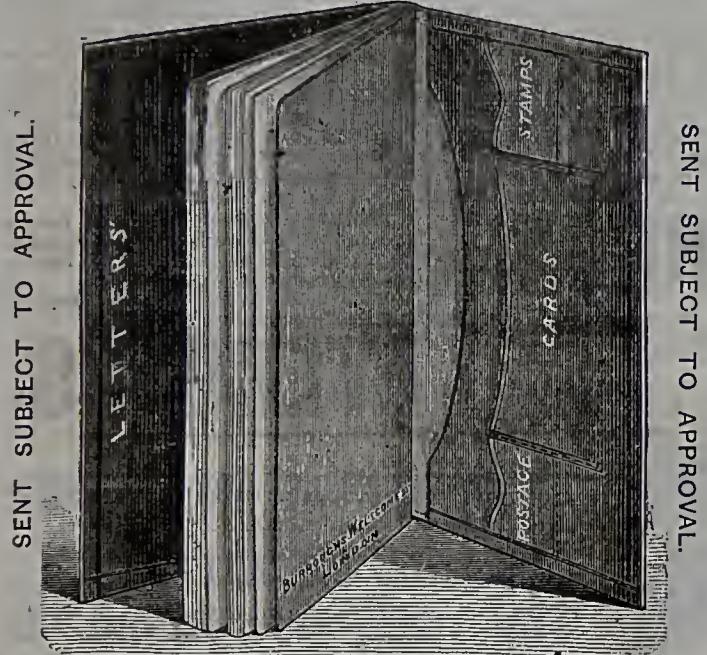
LONDON.]

DECEMBER 20TH.

[1890.]

To those who wish to make Christmas Presents to Medical Men, the following articles will be found most suitable:—

A B C MEDICAL DIARY AND VISITING LIST FOR 1891, with A B C RECENT MATERIA MEDICA.



The Diary, which is a great improvement on that of 1890, is got up in elegant style, and, moreover, is of convenient size for the pocket.

The British Medical Journal says:—"Contains a good deal of useful information."

The Edinburgh Medical Journal writes:—"The book is elegantly got up, and contains much valuable information, and has an A.B.C. Materia Medica especially of those new and rarer drugs which are now so universally used in the treatment of disease."

Supplied to the Trade, in silk covers, 2s. 6d. each; do., with morocco wallet to hold stamps, cards, letters, &c., 4s. each; do., velvet pile (a new leather) wallet, 5s. each; do., pigskin wallet, 5s. each; do., russia wallet, 5s. each. Name printed in gold, 6d. extra. Ophthalmic Colour Test, 6d. extra.

ANTIPYRIN.

Antipyrin has a marked influence on the lightning pains of tabes, cancer, otalgia, rheumatoid arthritis, supra-orbital neuralgia, &c. In migraine, says Dr. Kingsbury, it prevents as well as cures the attacks. Again, the British Medical Journal writes: "In Antipyrin we possess a powerful anodyne for pain of nervous and rheumatic origin."

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Will be happy to send Illustrated Price Lists to Pharmacists post free on request.

DIURETIN—"KNOLL."

Theobromine acts as a powerful renal stimulant, and is of especial value when it is desired to promote diuresis in many cases of dropsy with cardiac complications without influencing the heart's action. Diuretin—"Knoll" is more certain in its action, according to the reports of Dr. Schroeder and Gram, than either digitalis or adonidin. In their report these physicians state that Theobromine resembles caffeine in having a direct action on the kidneys, but it has not the irritating influence upon the nerve centres which characterises the former drug. Pure Theobromine is unsuitable for internal administration, it being so sparingly soluble (about 1 in 1600 of water), and, moreover, it is said to excite nausea. Diuretin—"Knoll," however, is an easily soluble compound of Theobromine, in the form of a white powder, which, when warmed, dissolves in about half its own weight of water, no precipitation occurring on cooling. The usual dose is 15 grains. This quantity may be repeated as often as every four hours until its full diuretic action is established.

HAZELINE.

This preparation has been tested by the most distinguished therapeutists of the day, and given precedence over all other preparations of *Hamamelis virginica* in the treatment of haemorrhage, catarrh, inflammation, &c. It is also supplied in the form of Hazeline Cream, which combines the stimulating and astringent principles of Hazeline with the emollient properties of "Lanoline." This cream has been used extensively for anointing chaps and abrasions of the skin, also in allaying rectal irritation. It is a bland, emollient, natural unguent, and will not turn rancid. It may be used with the Ward Cousins' Rectal Injector.

ICHTHYOL.

(IN SKIN-DISEASES.)

Ichthyol, discovered by Schröter, is distilled from a peculiar bitumen found in the Tyrol, and has the consistency of purified coal-tar.

An ointment containing 50 per cent. of Ichthyol is highly recommended externally in psoriasis.—*The Lancet*, Vol. II., fol. 577, 1885.

Ichthyol Pills and Capsules are prepared for internal administration; they do not cause eructations like the plain Ichthyol, and are agreeable for the patient to take.

STROPHANTHUS.

The value of Strophanthus as a diuretic and cardiac tonic in mitral disease has been fully confirmed since its introduction to the profession and trade by us. The preparations usually prescribed are the Tincture (1 in 20), and the Tabloids each containing 2 min. of the Tincture.

The British Medical Journal writes,

JUNE 9th, 1888:

"Those ['TABLOIDS'] destined for internal administration are less dense and quickly Disintegrate, as Bismuth Sub-nitrate, &c."

AGAIN,

The British Medical Journal writes,

NOVEMBER 15th, 1890:

"Placed upon the tongue, [they] ['TABLOIDS' of Sulphoral, Phenacetin, &c.] immediately begin to soften and Disintegrate"

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See *Recommending Notice of Medical Press and Opinions of the leading Dermatologists*.

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Detergents, acting for four hours, arrested future growth."

Of all Druggists, Wholesale
and Retail, throughout Great
Britain, Ireland, and Colonies.

LIQUOR

From the *Lancet*, Dec. 22, 1886 :—"In our hands it has been a most effective agent in skin diseases, especially of the chronic eczematous class, and one class of psoriasis which had resisted all other kinds of treatment speedily got well under the application of the *Liquor Carbonis Detergens*. We esteem it a very valuable addition to our list of skin remedies."

1871 :—"We have tested it, and can affirm its value as a detergent agent. We consider the Liquor is an article of great utility."

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Extract from the Proceedings of the Royal Society of Edinburgh :—"Experiments on the Chief Disinfectants of Commerce, with a view of ascertaining their power of destroying the spores of the 'Anthrax Bacillus,' by a Medical Officer of Health and Public Analyst. A 10 per cent. solution of Liquor Carbonis Detergens, acting for four hours, distinctly retarded growth of Anthrax, for the spores, whether in gelatin-pork or in the broth, did not commence developing for 24 hours. Undiluted Liquor 'Carbonis Detergens,' acting for four hours, arrested future growth."

The Practitioner of September, 1881 :—"Eczema connected with varicose veins of the leg—also Pruritus Scroti, Labiorum, and Ani—is best relieved by weak tarry lotions, one of the best of which is *Wright's Liquor Carbonis Detergens*."

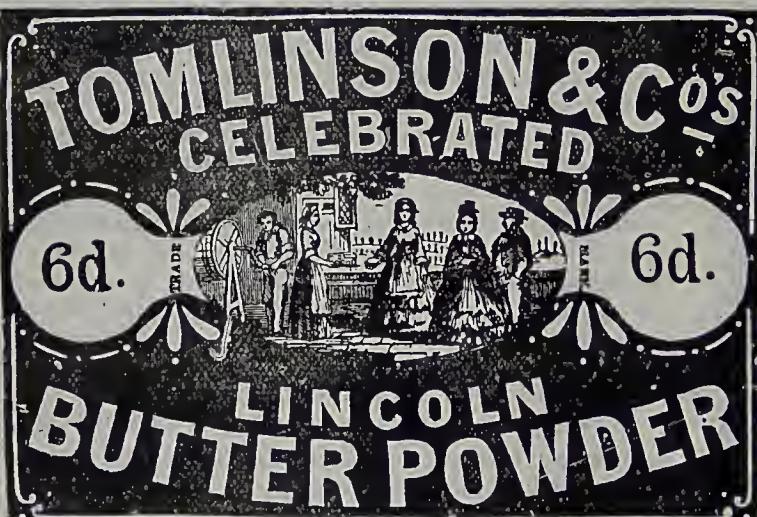
P. MCLEOD, Colonel R.A., Inspector-General of Ordnance, Ordnance Office Madras, writes Sept. 10, 1867 :—"I can certify that 'Liquor Carbonis Detergens,' has cured me of a Psoriasis of 21 years, incurred in Burmah, after every effort of such an able skin doctor as Sir Erasmus Wilson had failed."

CARBONIS

From the *Medical Times and Gazette*
Jan. 19, 1867 :—"We have more than once called attention to the value of this remedy in chronic eczema."

From the *British Medical Journal*, Sept. 22

DETERGENS.



Sold by Chemists over 35 years.

BEWARE OF IMITATIONS.

This Original Brand is Well Advertised, and Sells Readily.

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Boxes, 3d., 6d., 1s., 2s. 6d., and 7s. 6d.

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Supplied regularly to every member of the following Societies, who have adopted THE CHEMIST AND DRUGGIST as their official organ.

The Pharmaceutical Association of New Zealand.

The Pharmaceutical Society of Queensland.

The Pharmaceutical Society of South Australia.

The Hobart Chemists' Association.

The Launceston Pharmaceutical Association.

South African Pharmaceutical Association.

For Australasian subscribers the subsidiary journal, THE CHEMIST AND DRUGGIST OF AUSTRALASIA, is included.

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FIVE GUINEAS IN PRIZES.

We hope that a large number of subscribers who have not yet done so will devote a little time in the course of next week to filling up

THE DIARY COUPON

for the competition thereon announced. As already intimated, with every copy of THE CHEMISTS' AND DRUGGISTS' DIARY FOR 1891 which we have sent out to subscribers or purchasers in the United Kingdom, or which we shall yet supply during this month, we have inserted a coupon on which certain questions respecting the DIARY advertisements are asked. Only one coupon is supplied with each Diary. The competition is open to December 31, 1890, and when it is completed we shall be able to report which, in the opinion of those who take part in it, are the most effective, the most useful,

THE MOST TEMPTING,

or in other respects the most attractive of the advertisements contained within its covers. Advertisers themselves regard with interest this tourney, and as it is by their aid that we

are able to meet the requirements of subscribers, we ask the latter to give us the benefit of their co-operation, if not for the sake of the guineas, as a token of friendly feeling.

ADVERTISEMENTS OF SITUATIONS, &c.

We shall be able to receive these advertisements as usual next week until Friday morning, first post, and will post copies of Supplement containing such advertisements on Friday to all assistants, &c., who send us a stamped addressed wrapper for one. But as the Cannon Street office will not be open on Friday, it will not be possible to obtain them on that day by personal application.

ADDITIONS TO THE BRITISH PHARMACOPOEIA.

THIS work was issued from the printers on Wednesday. A copy will be sent by us post free to any address on receipt of the published price, 1s.

CANADIAN NOTES.

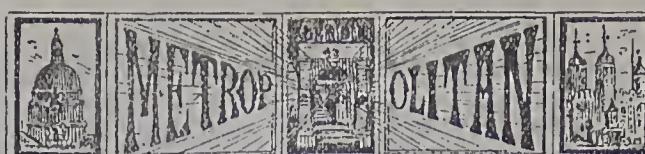
PARKE, DAVIS & CO.'S NEW LABORATORIES at Walkerville, Ontario, are a rather handsome building, from which they will be enabled very shortly to push Canadian trade. Although in Canada, the new laboratories are just opposite the firm's premises in Detroit.

THE ONTARIO COLLEGE—Seven members of the council of the Ontario College of Pharmacy have sent out a circular to the members, in which they state that they "have found it necessary in your interest to make certain radical changes in the management and affairs of the college." They add that "a complete statement is being prepared, which will convince the members that these changes are absolutely necessary in the best interests of the college." Until then they ask members not to be influenced by "the one-sided and untruthful statements of interested parties, anonymous writers, and petitions." This is a hit at the professorate of the college. The Brant District Druggists' Association have also unanimously adopted a resolution endorsing the course of the council, and pledging themselves to assist them in their efforts to get control of college affairs in the interests of the druggists. The association would also like the council to get hold of the *Canadian Pharmaceutical Journal*, by getting the present contract amended.

NEW COMPANIES.

LOUTH AERATED-WATER COMPANY.—Registered Dec. 15. Capital £1,000, in 5*l.* shares. The company is established with the object of manufacturing and selling soda, seltzer, lithia and potass waters, and all kinds of aerated and effervescent drinks and mineral waters; also for carrying on other businesses in connection therewith. The first shareholders are:—S. A. Hillier, Louth, out of business, 10 shares; J. Smaller, Louth, timber merchant, 20 shares; Robert Brough, Louth, retired draper, 10 shares; George Vere, Eastgate, Louth, accountant, 5 shares; John W. Dennis, Louth, chemist, 10 shares; Robert Mumby, Louth, chemists' assistant, 1 share; Thomas O. Burton, Louth, printer, 45 shares. Registered without articles of association.

SHADFORD & CO. (LIMITED).—Registered December 9. Capital, £1,525*l.*, in 5*l.* shares. The object of the company is to carry on business as wholesale and retail chemists and druggists at Spalding and elsewhere, as the company may determine. The first shareholders are:—Major Shadford, Spalding, gentleman, 1 share; Thomas Bloodworth, Spalding, chemist and druggist, 15 shares; Thomas Shadford, Epton, Spalding, druggist's clerk, 15 shares; Annie Foster, Spalding, spinster, 1 share; Margaret A. Shadford, Spalding, widow, 1 share; Fanny Bloodworth, Spalding, wife of Thomas Bloodworth, 1 share; Catherine A. Epton, Spalding, wife of T. S. Epton, 1 share. Registered without articles of association.



SULPHURIC ACID AND MANGANATE OF SODA CONTRACTS.—At its meeting on Tuesday the London County Council accepted the tender of Messrs. C. Tennant, Sons & Co. for the supply of 1,000 tons of manganate of soda at 16*l.* per ton, and of the Widnes Alkali Company (Limited) for the supply of 600 tons at 15*l.* 15*s.* per ton. The Council also accepted the tender of Messrs. Sadler & Co. for the supply of 1,000 tons of sulphuric acid at 1*l.* 14*s.* per ton.

SOUTH-WEST LONDON SCHOOL OF CHEMISTRY AND PHARMACY.—Young as this school is—for it only opened publicly in October—it felt strong enough to give a smoking concert last Friday evening, and one of our staff went down to smoke a pipe. While he was there he asked Messrs. Martin and Hill all about their new venture, and they showed him over their class-rooms and laboratories, which are well arranged and excellently adapted for teaching pharmaceutical students. The principals also make a feature of subjecting the students to periodical *riva-voce* examination similar to the official one. Our representative gathered that Mr. Martin is an old School of Mines student, who for twenty years has been doing a splendid work in Chelsea in promoting scientific education. Mr. Victor Hill, who is an experienced pharmacist, is an old pupil of his. Together they have been taking pharmaceutical pupils privately for some time, and now they appeal to a larger constituency. They appear to be well pleased with their success so far, and our representative, judging from what he saw and heard on Friday evening, thinks they have reason to be. At the concert there was some good talent, and, under the direction of Mr. Clarke, of the Cancer Hospital, things were kept going merrily for several hours.

PRESCRIBING HERBALISTS.—On Thursday, Mr. A. Braxton Hicks, the Mid-Surrey coroner, held an inquiry at the Star and Garter, Battersea Square, concerning the death of William Frederick Sidwell, aged 6, who died at 18 Winstanley Road, Battersea, on December 15. The mother stated that the child always enjoyed good health until last Sunday, when he complained of pains in his inside. She sent her husband to a herbalist carrying on business in the neighbourhood, and he prescribed some powders, which had no effect on deceased. On Monday, however, he seemed a little better, and she gave him some castor oil, which he did not retain, and on the following afternoon a doctor was summoned. The child died at 5 o'clock. Dr. Leonard Strong M'Manus, of 100 St. John's Hill, New Wandsworth, said he found the deceased in a very prostrate condition, and apparently suffering from acute peritonitis. Death ensued two hours after he arrived. A post-mortem examination revealed that the intestines were completely matted together, and the stomach contained matter which had regurgitated back from the bowels. In his opinion the cause of death was exhaustion from perityphilitis and peritonitis, which was accelerated by the mode of treatment. The Coroner: As a matter of fact, the powder was about the worst thing that could have been given the child? Witness: The very worst. It is a great mistake for any person to prescribe for a patient without seeing him first. Under proper treatment the child's life might have been saved. The Coroner: It is the best plan to go straight to a doctor in case of illness. Dr. M'Manus: Yes, but people will go to chemists and herbalists, and the greater the quack a man is, the better they like him. The Coroner: They generally go to a chemist when the child is alive, and to a doctor when it is dead. If they would only reverse the order of things I should not have as many inquests as I do. Chemists and herbalists can only guess what people are suffering from—they may be right, and they may be wrong; sometimes they are right, sometimes wrong. Mrs. Sidwell said she had never been in the habit of calling in a doctor, but after this experience she would certainly do so in future. The jury found a verdict in accordance with the medical testimony.

Provincial Reports.

Items of news, and newspapers containing matters of interest to the trade, sent to the Editor will much oblige.

BIRMINGHAM.

THE SURGEON AGREED.—Mr. Hawkes, the Birmingham coroner, held an inquiry, on December 11, relative to the death of a child seven months old. Deceased had been ailing a few days before its death, and the mother obtained a "teething-powder" and some "cough-stuff" from a chemist. The mother stated that deceased seemed to improve for a day or so, but got worse on Monday, and died. Mr. Gilroy, surgeon, said that he was called in on Monday, but the child was then in a moribund condition. It was beyond medical aid, and died from acute bronchitis. The Coroner: This is another of those cases where the parents neglected to call in a medical man in time. Mr. Gilroy: Yes. A verdict of "Death from acute bronchitis" was returned.

URINE ANALYSIS.—This was the subject of a paper by Mr. Henry Campbell, dispenser at Owens Hospital, read before the Midland Counties Chemists' Association on Tuesday night. After some preliminary remarks, Mr. Campbell said that the twenty-four hours' urine should be mixed and the sample analysed taken from the mixture. If that could not be done, then two samples should be taken daily, one in the morning and the other two hours after dinner. That was because albumen might be absent in the morning urine and present later in the day. The sp. gr. could be taken with the special hydrometer called urinometer at 60° F. Mr. Campbell then touched upon the acidity and alkalinity of the urine, showing how to determine these points; then he spoke of the colour of the liquid and urea content, recommending in the case of the latter estimation by the hypobromite process. Other points, such as the estimation of chlorides, sugar and albumen, were touched upon. In the course of the discussion regret was expressed that so small a number of the chemists of that city had turned out considering the importance of the subject. Mr. Cripps said he was afraid pharmacists as a body did not appreciate its value. As a matter of fact, however, a knowledge of the analysis of urine was often of the greatest benefit to chemists. He knew of a case in London where a chemist, through being able quickly late at night to make an analysis of urine, so enhanced his business that whereas at the time he was called upon to make the analysis it was practically worth nothing, he was able to sell it a couple of years afterwards for 80*l.* That was simply an illustration of how a small thing might lead to good results. Similar sentiments were expressed by Messrs. Perry, Gibb, and Alcock, who joined in the discussion.

BRIGHTON.

THE ANNUAL BALL promoted by the Brighton Association of Pharmacy is arranged for Thursday, January 29, at the Royal Pavilion. The Mayor of Brighton (Mr. Soper), the Presidents of the Pharmaceutical Society (Mr. Carteighe) and of the Brighton Association of Pharmacy (Mr. Savage), and Aldermen Cox and Manwaring figure as patrons, taking precedence of a more lengthy list of ordinary people whose names appear on the announcement as stewards. The tickets are 7*s.* 6*d.* for gentlemen and 6*s.* 6*d.* for ladies.

DONCASTER.

A SAPIENT JURY.—At Doncaster, last week, an inquest was held concerning the death of Mr. G. Goodere, a veterinary surgeon, formerly of Crowle, who was found dead in bed at the Spread Eagle Inn, Doncaster, with a bottle which had contained laudanum under his pillow. His pocket-book contained a note indicating that he intended to commit suicide. Thomas Haigh Connor, chemist, Market Place, was examined. He said he could not state whether the deceased obtained the laudanum at his shop or not. The jury re-

turned a verdict that the deceased had poisoned himself when in an unsound state of mind, and at the same time added a rider to the effect that it would be better if laudanum was scheduled by law as a poison.

LEICESTER.

BALL.—The third annual ball of the Leicester and Leicestershire Chemists' Association was held on Thursday, December 4, at the County Assembly Rooms (by kind permission of Sir Henry St. John Halford, Bart., C.B.), when upwards of 150 members and friends made merry till 3.30 A.M. the next morning. The event was regarded by all who attended it as a grand success, and some of the more eager are advocating another ball in March. The acting stewards were Messrs. W. Rowe, Davey, Ward, and Weall.

THE PHARMACY BILL.—A meeting of chemists was held at the old Town Hall on Thursday evening, December 11, to take into consideration the draft Pharmacy Act Amendment Bill. Mr. J. G. F. Richardson presided, and there was a fair attendance. Mr. W. B. Clark gave a short *résumé* of the Act. A long discussion took place on the various clauses, a resolution being ultimately carried giving general support to the Bill, but recommending that the clause preventing the managing of shops or dispensing of prescriptions by unqualified chemists' assistants do not come into force for two years after the passing of the Act, so as to enable unqualified assistants to pass their examinations.

LINCOLN.

YEW-POISONING.—Ten head of cattle were poisoned last week at a farm at Whaley, Lincolnshire, and three of them died, from eating the foliage of the yew.

PRECIPITATED SULPHUR.—Mr. Thomas Holland, chemist, High Street, Lincoln, was charged at the City Police Court on December 12, with having infringed the Sale of Food and Drugs Act by selling, by his agent, for precipitated sulphur a substance which was adulterated with 58·8 per cent. of hydrated sulphate of lime. Detective Horkney stated that on November 7 he went to the shops of several chemists in the city. At defendant's shop he asked for 1½ oz. of precipitated sulphur. He asked if Mr. Holland was in, and the assistant said it would be all right. He told the assistant it was for analysis, and he (witness) divided the article into three parts. One part he gave to the assistant, another part he kept himself, and the third part he sent to the city analyst (Dr. Harrison). The result of the analysis showed that the drug was adulterated to the extent of 58·8 per cent. William Harby, the assistant, said he showed Detective Horkney the label "Milk of Sulphur," and he replied, "All right." The defendant said he would never have sold milk of sulphur as precipitated sulphur. If they had been asked for precipitated sulphur he certainly would have got it for the purchaser, but at the time they did not happen to have it in stock. The chairman said they accepted the defendant's version, believing he got a little behind in the way of not getting it into stock. They did not think it was his intention to defraud. He would be fined 15s., including costs.

LIVERPOOL.

A LOCAL CELEBRITY, of pharmaceutical origin, has lately died. "Joe Priestley" was as well known in this city as the Town Hall, and for years he was Jack Point of the Flags, singing, reciting, and declaiming dramatic pieces for the delectation of the young bloods on 'Change. A merry, mad fellow he was in his time, and many are the droll stories in circulation which tell of his numberless pranks and daring escapades. The sharp-featured, keen-eyed, somewhat wizened little man, who from morn till night was constantly seen pacing our principal thoroughfares, with oftentimes crowds of jeering boys at his heels, would be regarded in Scotland as a "natural," and in Ireland as the village fool or jester. He was exceedingly popular with the young cotton-salesmen, and not infrequently when they found time hanging heavily on their hands, they sent for this merry man, who for a few coppers would thrill them with Shakesperian tragedy or excite their laughter with comic episodes and farcical episodes.

He had a wonderful genius for satirical and prosaic epigram, and very few there were who cared to provoke an encounter of wit with this "funny fool," "clever rogue," "dramatic vagabond," as he was alternately called, by his wide circle of acquaintances. Of late years he had degenerated into a sort of chronic mendicant: under the guise of selling matches, or dispensing what he facetiously called "a penny-worth of Hamlet," his importunities had become income. He was the son of a chemist and druggist, who thirty years ago carried on a prosperous business in Lord Street. Young Joseph might have done well had he followed in the footsteps of his father. But he preferred to follow an erratic career, and after a series of wild adventures he descended in the social scale, becoming the nomadic character in which he had been known for so long among us.

CHEMISTS' ASSOCIATION.—At the last meeting, held December 11, there was a good attendance, the small lecture-hall of the Royal Institution being well filled. Mr. Evans moved—"That the Council be requested to take into consideration the desirability of meeting at an earlier hour in the evening." Several members spoke in favour of this resolution, and seven o'clock was approved by a large majority. Five new members were elected. Following the papers by Mr. Conroy and his son (published in last week's *CHEMIST AND DRUGGIST*), there were good discussions, in which the President, Messrs. Barrett, Evans, jun., Buck, Wellings, Abraham, Ward, and others took part. It was considered that a public analyst acted unfairly in reporting that he had examined certain drugs and found them adulterated when no action had been taken on his finding, as although no one individual was specially injured, the trade was prejudiced in the eyes of the public. Mr. J. T. Conroy's paper was illustrated by several successful experiments; a large sample of thiophene, and samples of the substances used in its production were exhibited, and the blackboard was soon covered by graphic and other formulæ—without reference to notes—which showed considerable ability and a thorough acquaintance with the subject on the part of the lecturer. He was highly complimented on the able manner in which he had made clear a complex matter. It was understood that a paper would be read at an early date on "The additions to the Pharmacopœia." In connection with his paper, Mr. J. T. Conroy writes to say that throughout the paper, as reported in our last issue, instead of the word printed "benzinc" there should be substituted "benzene." The context, of course, shows that the coal-tar product is meant, and not the petroleum benzine. "Nitrites," on page 809, fourteenth line from bottom, should be written "nitriles"; and on page 810, line 2, "Baeyer" should be substituted for "Balyu."

MANCHESTER.

SUPPER.—The staff of Messrs. Jas. Woolley, Sons & Co held their annual supper a week ago at the Crown Hotel, Booth Street. Mr. W. Lane was in the chair, and there was a good muster and a lively entertainment. Mr. James Woolley and Mr. A. Balmforth, the senior traveller, replied for the firm, and Mr. E. H. Chapman, Mr. E. S. Johnstone and Mr. R. H. Gourlay contributed songs which were much applauded.

A MUNIFICENT PROPOSAL.—At the meeting of the Pharmaceutical Association last week, Mr. F. Baden Benger, who was in the chair, said he had been requested by a gentleman (whose name at present he was not at liberty to mention) to state that it was his intention to offer a scholarship, of the yearly value of 30*l.*, to be competed for by students of the North of England, and to be tenable at Bloomsbury Square, the examination to be conducted on lines similar to the Bell scholarship, and the final details of the scheme to be left in the hands of the association. Mr. Benger expressed the pleasure which it gave him to make this announcement, and said that the offer came from a gentleman who was present at the meeting which was addressed by Mr. Carteighe, and was a direct result of that gentleman's visit to Manchester. The members present also were unanimous in their expressions of pleasure, and it was incidentally remarked that this was the first instance in which such an important aid to the advancement of education had been given through a local association.

NOTTINGHAM.

MESSRS. NEWBALL & MASON, the well-known manufacturers of extracts of herbs, temperance drinks, wine essences, and fruit syrups, have recently removed from Park Row to large and commodious premises known as Hyson Green Works. These works consist of several buildings, the principal one containing four fine rooms, each being nearly 125 feet in length. These are well supplied with steam-power and heat. On the ground-floor goods are packed, and at one end there is a printing office, where six persons are constantly employed. The bottling and finishing is done on the first-floor, and stock is kept in the two upper rooms. In the outside buildings are the mills and laboratories, which are fitted with extensive and costly plant. A view of the new works appears among the advertisements this week.

THE ANNUAL DINNER of the Notts Chemists' Association was held at the Masonic Hall on December 10. Mr. Councillor Fitzhugh, J.P. (president), was in the chair. Among the toasts Mr. Beilby proposed "The Pharmaceutical Society of Great Britain," for which Mr. W. H. Parker (local secretary) responded. Both the proposer and the acknowledger of this toast intimated the opinion that the Pharmaceutical Society did not do as much as it might do for the trade; but Mr. Parker said it was the only Society which had the power to do the trade any good, so he always gave it his support, and would like to see more chemists become members. Mr. Gill proposed "The Teachers of Science Classes," and Professor Clowes and Mr. J. W. Carr, B.A., responded. Professor Clowes proposed "Success to the Nottingham and Notts Chemists' Association." He said the association was his ideal of what a chemists' association should be. Councillor Fitzhugh responded. Mr. J. Wilford (treasurer) announced that a donation of 20*l.* had been received from the Pharmaceutical Society to assist them in founding a dispensing class, the arrangements for which were now nearly completed, and the class would be fairly launched after the Christmas vacation. Other toasts were the "Town and Trade of Nottingham," proposed by Mr. Rogersoo, to which Mr. Bolton responded: "The Visitors," and "The Chairman and Vice-chairmen." Songs and recitations were contributed by Messrs Bird, Bass, Casson, Rowes, F. Gill, Bartlett, Parr, Hooker, and Pinder. Mr. A. Watson gave a violin solo, and Mr. Dennis a legerdemain performance. Mr. H. Woodhouse presided at the piano.

IRELAND.

MESSRS. T. H. & J. EDGAR, who have businesses at Abbeyleix and Dromure, have lately purchased another at 60 Hill Street, Newry.

CARBOLIC-ACID POISONING.—A girl was found dead on Sunday in a shed at Kingsend, and it was clear that her death had been caused by drinking a quantity of carbolic acid, but at the inquest the jury could not ascertain whether she had taken it intentionally or inadvertently.

CHEMISTS AND DRUGGISTS BEFORE 1875.—The Pharmaceutical Society have issued forms for persons to sign who claim registration under the several clauses of the act of 1890. The one for chemists and druggists to sign who were in business before 1875, and who can consequently claim registration as chemists and druggists may present some difficulties. The Council are authorised by the Act (sec. 6) to require from applicants "such evidence as they may think fit" in corroboration of the declaration. They have thought fit to require a magistrate to certify to the truth of the certificate from his own knowledge. If this is to be a hard-and-fast rule there may arise many cases of hardship. For instance, one applicant now in London as an assistant. He wants to be registered, and says he was in business before 1875 in an Irish town. He says no magistrate in England knows anything about him, and the only one who knew him in Ireland is dead. What are he, and others like him, to do?

THE EXAMINATIONS UNDER THE NEW ACT.—A Belfast correspondent writes that the first examinations under the new Irish Pharmacy Act will take place on Monday next for the Ulster district in the Queen's College, Belfast, Dr. McKinney acting as examiner. Dr. McKinney is thoroughly up in all the subjects with which he will have to deal.

He came originally from the druggists' counter, and having acquired the licence of the Pharmaceutical Society, afterwards took the degree of M.D. with honours. It is considered rather curious that many of the citizens, including some of the leading business-men who, as chemists and druggists, have been proved quite capable and upright in all transactions, should be obliged to submit themselves to an examination. Consequent upon the new development, the Pharmaceutical Society will shortly have a large amount in the bank to its credit, and the opinion is growing that a portion of this should be devoted to the erection of a hall or school of pharmaey in the north of Ireland, the control to be in the hands of a sub-committee of the Society, and details to be carried out by a joint committee of the Society and the Chemists' and Druggists' Association. In this school classes could be formed for juniors, and also for those "grinding" for the pharmacy licence. The suggestion is expected to be taken up in a practical spirit ere long.

SCOTLAND.

OUNDEE.

"GEMS" was the subject of the paper read before the Chemists' Assistants' and Apprentices' Association on Thursday, December 11. Mr. W. Lamont, of Brechin, was the writer, and Mr. Lindsay the reader. We gather from the report supplied to us that the paper had nothing to do with precious stones, but had reference to such matter as makes up our "At the Counter." The paper was well received. The association's eonversatione is to be held in Gray's Rooms on January 21, 1891.

EDINBURGH.

NO BILLET has been issued for an evening meeting of the North British Branch this month as yet. Papers, we hear, are difficult to secure. The Addendum ought to afford material for a field-night when it has been out long enough to be considered.

SALICIN AND SALICYLIC ACID.—Since the crusade against artificially-prepared salicylic acid was initiated by Professor Charteris, the use of salicin has been largely revived. Several dispensing houses tell us that their consumption of it has gone up rapidly during the last few months.

PROFESSIONAL ETIQUETTE.—The Royal College of Physicians, at a meeting held last week, unanimously adopted the following resolution:—

That this College records its regret at the publicity which has recently been given to certain initial experiments upon Koeh's system of treatment of tuberculosis as injurious to the best interests of the public and the profession.

CHEMISTS' ASSISTANTS' AND APPRENTICES' ASSOCIATION.—The seventh annual eonversatione came off at the Literary Institute Hall, last Friday evening. Mr. Donald McEwan, President, occupied the chair and was supported by Messrs. William Gilmour, F.R.S.E., chairman of the executive of the North British branch; J. Blenkiron, vice-President, Wm. Aitken, F.L. Dewar, W.B. Dougall, R. MacAlley, D. McGlashan, D. McLaren, C. A. Maepherson, and T. Thompson. There was a large attendance of members and their friends. From 8.30 to 10.30 was devoted to a very high-class and well-rendered programme of songs, recitations, and instrumental pieces contributed by Misses Richardson, Wilkinson, Wright, and Yule and Messrs. Aitken, Brickman, Duncan, Greig, Hanson, Hogg, Smith, Thompson, Winram, Wood, and Young; Mr. Arthur Lumsden acting as accompanist. Afterwards, upwards of seventy couples began to trip the light-fantastic, and joy was unconfined till 4.30 in the morning. Messrs. W. B. Cowie and H. G. Parker were the pilots of the terpsichorean devotees. As usual the platform was very tastefully decorated with plants lent by Mr. James Buchanan. Messrs. Baildon & Son, Duncan, Flockhart & Co., Mackay & Co., Maefarlan & Co., James Robertson & Co., and T. & H. Smith & Co. sent an ample supply of aerated waters; and the Bovril Co., the originator of which hails from this quarter, sent a supply of bovril which was much in demand.

A REMEDY FOR CONSTIPATION is proposed by Dr. Platani, of Berlin. It is to blow a pinch of powdered boracic acid into the rectum.

Foreign News.

HONOURS FOR KOCH.—On Sunday, December 21, a grand torchlight procession will be held by the students of the Berlin University in honour of Professor Koch.

QUICKSILVER-MINING IN GERMANY.—The Credit Bank of Dresden has bought a large tract of land in the neighbourhood of Mantsche and Wippich for the production of the mercury which has recently been discovered there.

BRAZIL FOR THE BRAZILIANS.—A new pharmacy law has been adopted in Brazil. One of its clauses prohibits anyone from becoming the owner of a pharmacy or druggist's shop who has not studied at a Brazilian school of pharmacy and passed the Brazilian examinations.

A SCHOOL OF PHARMACY has been established in Detroit, Michigan. It is a department of the Detroit College of Medicine, and has a good staff of teachers for all the subjects required by pharmaceutical students. The school will begin operations on January 5, 1891.

GERMAN CHEMICAL DIVIDENDS.—So far as present indications go, the shareholders in Schering's Chemical-works (Berlin) will receive a dividend of from 18 to 20 per cent. for 1890. In 1889 they had 18 per cent. The Farbenfabriken (formerly Fr. Bayer & Co.), of Elberfeld, are likely to return at least 15 per cent., or the same as last year.

SULFALDEHYDE.—This is the name given by Trommsdorff to a mixture of aldehyde and sulphoparaldehyde $[(C_2H_4S)_3]$, boiling at 45° to 50° C. The action of this liquid has been studied, and it has been found by Luisini to produce a deep sleep in frogs and rabbits without any bad after-effects, and 1 milligramme of it had the same effect as 25 milligrammes of paraldehyde.

JAY GOULD INTERESTED IN ALKALI.—Mr. Jay Gould is credited with having acquired the largest salt plants in the United States—viz., the Diamond, the New York, and the Pennsylvania works, all situated in Hutchison (Kansas). These works have been conveyed to the Missouri-Pacific Railroad, which is controlled by Mr. Gould, for a consideration of \$80,000. Rumour has it that the purchasers of this valuable property intend to add to the capacity of the works, and likewise to erect a soda-ash plant at a cost of \$500,000.

SOLVAY & CO.'S ALKALI-WORKS.—According to the journal of the Dutch Society for the Promotion of Industry, the production of soda in the combined works of Messrs. Solvay & Co. has risen from 3 cwt. in 1864—when it was first commenced—to 400,000 tons in 1889. The latter figure represents about one-half of the world's consumption. The Société Solvay & Cie. owns, in addition to the immense works at Couillet and Varangéville-Dombasle in France, three factories in Germany (Sarralbe, Wyhlen, and Bernbnrg), one in Russia (Beresniki), one in Austria (Ebensee), and one in the United States (Syracuse).

THE UNQUALIFIED PARTNER IN AMERICA.—Some weeks ago, the *Pharmaceutical Era* reports, the Pennsylvania Board of Pharmacy had Charles Baker, of the firm of Houch & Baker, Greensburg, arrested on a charge of compounding prescriptions, he not having the certificate of a registered pharmacist, but only that of a clerk. The jury, on November 15, brought in a verdict of acquittal, and placed the costs on the Board. The case consumed considerable time, and, as it was a test-case, will put a stop to other prosecutions which would have followed a verdict of guilty. The secretary to the Board of Pharmacy testified that it was brought at the instance of the druggists of Greensbnrg.

DR. KOCH'S REMEDY.—Reports come from St. Petersburg of the discovery by a physician there that Dr. Brown Sequard's famous liquid produces the same effect in cases of tuberculosis as Dr. Koch's lymph. Dr. Brown Sequard, however, has denied that his liquid could have any direct power against tuberculosis, but he claims that it would, in tubercular cases, support the patient until he got well. He had confirmation from all parts of the world that the great weakness caused by the disease could be combated by his

method, and the Russian doctor Uspensky had stopped, if not cured, by its means cases of galloping consumption. The great trouble in tubercular cases was to prevent weakness until nature threw off the disease.

A NEW INSECT POWDER.—At a recent meeting of the Berlin Pharmaceutical Society Mr. T. Waage spoke about a new drug imported from Venezuela as a substitute for insect powder. This consists of the powdered leaves of *Croton flavens*, a plant of which there are several varieties indigenous to the West Indies and the northern part of South America. The plant referred to is believed, however, to be *C. flavens*, var. *balsamifer*. The leaves and young twigs of the plant are whitish-yellow or rusty coloured, and downy. The odour of the leaves is peculiar, but not disagreeable, and when rubbed the drug recalls the odour of sage. The powder irritates the epithelium, and, according to Dr. Thoms, who is an authority on insect powder, it contains fatty and essential oils, tannin, and phloroglucin.

QUICKSILVER IN BRITISH INDIA.—Up to the present time mercury does not seem to have been discovered in any large quantities in British India, though the persistent rumour that asserts its plentiful presence in the Andaman Islands can hardly be without some basis. The probable explanation may be in a discovery of cinnabar in the Little Andaman, which has, as yet, never been thoroughly searched, as its rocks, of the early tertiary period, are interspersed with volcanic "faults" closely similar to those of the great mercury-beds of California. The author of "Hamilton's East Indies" saw in 1694 a man who had brought much mercury from the Little Andaman (of which he was a native, stolen in his youth and partially civilised) to the Nicobars. It has been discovered in Cannanore in spots of pure metal in a bed of laterite, but never seems to have been much developed. Pure mercury is brought from Afghanistan, said to be obtained from Pir Kisree, some 250 miles beyond Candahar. The trade, however, has never reached any considerable size.

THE CEYLON CINNAMON-RING.—Last year the great majority of the Ceylon cinnamon-growers entered into an agreement not to prepare any cinnamon-chips, with the object of forcing European distillers and other consumers to buy the bark itself, and thus to create an improved market for the latter. But the agreement has practically become a dead letter, and Mr. Jardine, one of its principal promoters, now writes to the *Ceylon Observer* that he intends calling a meeting of the parties to the agreement in order to clear up the situation. Mr. Jardine thinks that the high price which has ruled for chips this year has prevented the cinnamon-oil distillers (whose raw material the chips are) from distilling any essential oil, and has therefore compelled them to export the chips. But, according to the *Ceylon Observer*, that view is not corroborated by the Customs accounts of the island, which show that of cinnamon-oil the export in 1888 was 28,645 oz.; in 1889 it equalled 32,004 oz., and for ten months of 1890 it is no less than 67,825 oz. On the other hand the exports of cinnamon-leaf oil show a large reduction, 52,744 oz. in ten months of 1890 against 75,000 oz. in 1889, and 335,000 oz. in 1888.

FRENCH PHARMACEUTICAL NEWS.

(From our Paris Correspondent.)

MAY IT REST IN PEACE!—The medicine-stamp tax having been left out in the final make-up of the Budget, the Bill has died a natural death. To the taxpayers at large Parliament will offer as New Year's presents a big loan and new taxes. But the pharmacists have escaped it for this time.

NEW ACADEMICANS.—At the Academy of Medicine on November 25 Dr. Périer was elected a member for the section of surgical pathology, and on December 9 Dr. Dieulafoy was elected a member for the section of medical pathology. At the Academy of Sciences, on December 15, Professor Mallard was elected a member for the section of mineralogy.

LEAD IN SYPHONS.—For some time past no lead was found in articles of general consumption. But now Professor Moissan has detected the contamination in carbonated waters sold in syphons. A memoir of his, read before the Academy of Medicine, has called attention to this source of danger. The metal, he thinks, is, through the action of carbonic acid, dissolved out of the tin and lead alloy which the syphon-head is made of. The present allowance of a small percentage of lead, in his opinion, should be rescinded, and none but chemically pure tin tolerated.

TO DISTINGUISH ARSENIC FROM ANTIMONIAL STAINS.—Professor G. Denigès, of the Bordeaux College of Pharmacy, has proposed a simple test to distinguish arsenic from antimony stains in toxicological investigations. The suspected stain on the porcelain dish is to be sprinkled with a few drops of pure nitric acid. After a slight heating, to complete oxidation, 4 or 5 drops of ammonium molybdate (in nitric acid) are added. With antimony stains no change occurs, while with arsenic, even in quantities as small as one-fiftieth or one-hundredth of a milligramme, a yellow precipitate of ammonium arseniomolybdate can easily be noticed and identified.

PoISONED HIS BROTHER.—In July last Jules Rouillé, a gamekeeper in the Perseigne forest (Sarthe), went to see his younger brother, Ludovic, a farmer in a neighbouring village. It was near 9 P.M., and as the visitor said he was very thirsty Ludovic went to the cellar for a pitcher of cider. During his short absence Jules, it seems, threw some poison in his brother's salt-box. The next day, on taking his first meal, the farmer found his soup to taste so bitter that he gave it to the pig, and a few minutes after the animal died in tetanic convulsions. The man for some time was very ill, but eventually recovered. He and his father having several times declared before witnesses that Jules had attempted to kill his brother by poisoning his salt with some of the styrchnine entrusted to gamekeepers for destroying wolves, the elder brother was arrested, and tried a few days since at Le Mans assize court. Although before the court both father and son denied all their former accusations, the jury found the gamekeeper guilty, and five years' hard labour was the sentence.

END OF THE AMER PICON LITIGATION.—Gaëtan Picon, an Algerian distiller, years ago invented a bitter, which he called, first, "Amer Africain," and, finally, "Amer Picon." In 1872, wishing to retire, he disposed of the business, a most lucrative one, in favour of a company composed of his son Honoré and his six sons-in-law, under the firm name of Picon & Cie. In 1882 the old gentleman died, and his youngest daughter, Thérèse, having separated from her husband, by name Noel, the company, in 1883, reorganised without her, and, she claims, treated her unfairly. So in 1887, having obtained divorce from her husband, and recovered her right to her maiden name, she formed a partnership with one Nicolas, under the firm name of Thérèse Picon & Cie., and began selling and advertising "L'Amer de la fille Picon." The new venture, owing probably to the atrocious pun, is said to have been successful, but was the signal of a series of suits and cross-suits, carried on before several courts with the bitterness peculiar to family quarrels. After preliminary skirmishes at Aix and Marseilles, the main battle was fought before the Seine Civil Tribunal. The older firm, on the pleas that Picon's youngest daughter formed a sham partnership to which she only contributed her name, that she did not know the real formula of the bitters, and that the new article was only a fraudulent imitation of the genuine Amer Picon, prayed that the firm in question be enjoined from continuing business and sentenced to 200,000f. damages. On her side, Theresa denied all the allegations, claimed that her brother and brothers-in-law improperly use on their labels the Cross of the Legion of Honour, said distinction having been granted to the elder Picon as a founder of important distilleries in Algeria, not as the inventor of the Amer Picon, and prayed that the older firm be restrained from having it on their bills and labels; also that owing to several seizures of her goods, one in 1889 at the Exposition, she be allowed reasonable damages. The court held that the Fille Picon having lawfully resumed her maiden name had a right to use it in business; that the partnership formed with Nicolas was a *bona-fide* one, she not only bringing in her name, but having a share in the business

transactions; that it is immaterial whether she knows or not the formula of the paternal bitters; that the present appearance and get-up of her product are different enough from the Amer Picon to preclude any confusion. On the other hand, the court held also that the propriety of using the Cross of the Legion of Honour on the bills and labels is a question not coming within the jurisdiction of the Tribunal, such usage being subject to the regulations established by the Legion of Honour Council; that the seizures of goods were not made without good reasons, and caused no appreciable detriment. Consequently, the suit was dismissed, both parties were denied all damages, and the costs of the action ordered to be divided equally among them.

Gazette.

PARTNERSHIPS DISSOLVED.

Boutell H., & Hutton, H., under the style of Tyles & Co., chemists and druggists.

Gray, E. J., & Speller, F. G., under the style of Gray, Nephew & Co., Mining Lane, City, Colonial brokers.

Wallbridge, J. G., & Large, R., under the style of J. G. Wallbridge and Co., Stalybridge, chemists and druggists.

SCOTCH SEQUESTRATION.

Johnstone, J. C., Bo'ness, aerated-water manufacturer and bottler—December 22, at 11.30, Douglas Hotel, Bo'ness.

THE BANKRUPTCY ACT, 1883.

RECEIVING ORDERS.

Clarke, John James Gordon Webster, Nottingham, dentist's assistant.

Pettinger, John Henry, Carlton, near Selby, late of Hollinwood, near Oldham, surgeon.

Souter, Edwin, Dorking, mineral-water manufacturer.

ADJUDICATIONS.

Clarke, John James Gordon Webster, Nottingham, dentist's assistant.

Diggle, Charles Frederick, Oldham, surgeon.

Naylor, William Henry, Louth, aerated-water manufacturer.

Pettinger, John Henry, Carlton, near Selby, late of Hollinwood, near Oldham, surgeon.

ORDER MADE ON APPLICATION FOR DISCHARGE.

Gray, Joseph Benjamin, trading as J. B. Gray & Co., Englefield Road, Islington, and Mincing Lane, City, merchant and commission agent—discharge suspended for two years.

EXTRACT FROM DEEDS OF ARRANGEMENTS.

The following deed of arrangement with creditors has been filed at the Bills of Sale Office, under the provisions of the Deeds of Arrangement Act, 1887. Some of these deeds are for the purpose of carrying out compositions with creditors (and such are specified below), but the great majority of them are "assignments" in the ordinary form, to a trustee or trustees, for the benefit of creditors. The Act referred to expressly provides that registration shall not give validity to any deed which is an act of bankruptcy, and there is no provision, in the Act, making any of these arrangements binding upon dissenting creditors.

Taylor, Henry, 46 Nuttall Street, Accrington, and 140 Colne Road Burnley, chemist and druggist. Trustee: George Farrer, 21 Nicholas Street, Burnley, accountant. Date, December 12; filed, December 17: unsecured liabilities, 1631.0s. 5d.; estimated net assets, 751.; creditors fully secured, 251.

	£ s. d.
Raiiss Bros. & Co., London	16 8 3
Beecham, T. & J., St. Helens..	30 0 0
Eooth & Openshaw, Blackburn	10 0 0
Bourne, Johnson & Latimer, London	17 16 5
Grimshaw, Ann, Accrington..	10 0 0
Harrisou, J., Accrington	15 0 0
Jones, J. H., Oswaltwistle	10 0 0
Oldfield, Pattinson & Co., Manchester	19 0 0

Legal Reports.

SELLING A CHEMIST'S BUSINESS.—A QUESTION OF COMMISSION.

In the City of London Court on Saturday the case of Hawkins, trading as Orridge & Co. v. Toone was heard before Mr. Commissioner Kerr. The plaintiff, who is a medical transfer agent, of 32 Ludgate Hill, E.C., sought to recover the sum of 32*l.* 2*s.*, commission and for work and labour done on the sale of a chemist's business upon the instructions of the defendant, Mr. Joseph Vidler Toone, pharmaceutical chemist, New Bond Street, Bath.

Mr. Lynden Bell, instructed by Mr. F. W. Spencer, was counsel for the plaintiff, and Mr. Radcliffe appeared for the defendant, who had paid 5*l.* 12*s.* into court.

The defence, shortly, was that the business was not introduced to the purchaser by the plaintiff.

In opening, Mr. Bell said that in July, 1889, his client received a letter from the defendant, in which he said he was desirous of disposing of his business, his health and energies being no longer equal to the requirements. After forty-six years' steady work as a chemist he felt compelled to take a rest. His business had been carried on for thirty-nine years, first by Steele & Smith as partners, and then by Clarke Smith alone. He (the defendant) had had it for sixteen years, having bought it from Clarke Smith in 1873, and had had a good measure of success in it. Having been so advised, he applied to the plaintiff in order to assist him to dispose of it. He would be glad to get a reliable opinion as to its present value, and, if a purchaser could be found, to have the sale negotiated for him. What would be the best mode of procedure, he wanted to know. Would correspondence be sufficient, or would a personal interview be necessary? He did not want the business to be advertised if that could be avoided. In answer to this, on July 22 the plaintiff said they would be happy to be of service in the matter, and as it was essential that they should see the premises, &c., before giving a definite opinion, they proposed paying a visit at the end of the week. The plaintiff went to Bath, and discussed the question with Mr. Toone, taking all particulars with regard to the business. From that date, July, 1889, there had been an immense amount of correspondence. On September 19, 1889, the defendant wrote saying he had received a letter from Mr. Brett, of Leicester, saying he had a purchaser who was wanting just such a business, and asking for particulars of price and rent. "Being anxious to get away, if possible, before the winter" (Mr. Toone wrote), "and not hearing of any other inquiry for it, I sent him a few particulars of price, rent, lease, &c. To-day a gentleman has called on me, to whom Mr. Brett has communicated the matter. I think he is a likely purchaser. My difficulty is this: As Mr. Brett appears to have introduced him, how shall I be situated with regard to you? I should much prefer that you should carry on the negotiations on my behalf, but I shall not want to pay a double commission. I shall be glad if you will tell me frankly what course you would advise me to take under the circumstances." The plaintiff replied on September 21, saying:—"Mr. Bell, the gentleman to whom you refer, has called upon me to-day. He is inclined to consider the matter. I do not, however, know whether he will buy; he is very fond of considering businesses. Should, however, Mr. Bell buy, I need not give you any anxiety about the commission. I shall be very happy to divide it with Mr. Brett." On September 27 the defendant wrote, saying he had communicated with Mr. Brett, requesting him not to mention this business to any of his clients, and informing him that he should not be prepared to treat with them should he do so. "This," he said, "will leave the matter entirely in your hands. I have received a letter from Mr. Crocker asking particulars, and have written to him declining to give him any or to authorise him to act for me in any way. My experience with Mr. Bell convinces me that a multiplicity of agencies will result in confusion." After that nothing more was done in 1889. There were other negotiations which came to nothing. Over 100 letters had been written by the plaintiff on the subject; but no material step was taken until July 7, 1890, when the man who actually purchased

the defendant's business came on the scene. Mr. Fred A. Cairns, who was at the time an assistant with Messrs. Bell & Co., of 225 Oxford Street, wrote to the plaintiff's saying that Mr. Atkins, of Salisbury, had mentioned to him that he thought they had the transfer of the businesses of Mr. Toone, Bath, and of another at Weymouth, and had recommended him to write to them for particulars. He asked if either gentleman was willing to take an assistant with a view to purchase. To this the plaintiff's replied the same day saying that both the businesses referred to were for sale, but as neither required an assistant they would not take one with a view to purchase. Both businesses were well known, especially the latter, and required no test as to bona fides. If Mr. Cairns was disposed to entertain an immediate purchase they would be glad to see him. On July 11 last Mr. Cairns wrote asking for full particulars of the Weymouth business, but, at plaintiff's request, he called upon them, and then made inquiries as to both businesses. Mr. Hawkins conversed with Mr. Cairns with regard to them, and no doubt pointed out, as he was acting fairly, that he thought the Weymouth business would be the more satisfactory of the two. As a fact, the Bath business was also discussed, and the different terms mentioned. Mr. Hawkins drew attention to the fact that the business at Bath was perfectly *bona fide*. Having regard to Mr. Cairns's antecedents, Mr. Hawkins felt that the Weymouth business would be more suitable, and more like the trade Mr. Cairns had been accustomed to. A printed form with all the details was given to him relating to both businesses. After that interview Mr. Cairns communicated with the proprietor of the Weymouth business, and went to see him, but apparently it did not suit him. The plaintiff heard nothing more of the matter until August 27, when Mr. Cairns wrote, "I thank you for your note of the 26th re business for sale in Bath, and beg to inform you I have purchased a business." On August 29 Mr. Toone wrote and said practically the same thing—that Mr. Cairns had purchased the business through the introduction of Mr. G. B. Crocker, and therefore he would be obliged by the plaintiff removing it from his list. He added, "I should have been better pleased if the purchaser had been one of your clients, but I think you will see that I could not do other than dispose of it under the circumstances." The plaintiff's case was that it was he who first introduced the purchaser. There was expert evidence in court to prove what was now recognised as the practice, that, where more than one agent was employed, the first agent who introduced the purchaser was the person who was entitled to the commission.

Mr. Commissioner Kerr: Oh, yes. The simple question is, what does Cairns say as to who introduced him?

Mr. Bell said he would establish what he stated was the rule in the chemical and drug trade as to the sale of businesses. The point was well laid down in the case of Cunard v. Van Oppen, in which several brokers of high standing stated that, where more than one entered into negotiation, he who first introduced the matter was entitled to the commission.

Mr. Commissioner Kerr: I heard Baron Parke lay down that law twenty-five years ago in the Court of Exchequer.

Mr. Bell said what happened here was that Mr. Cairns, having got all the particulars from the plaintiff, inquired into other businesses. He seemed to have seen an advertisement in THE CHEMIST AND DRUGGIST, which did not mention the defendant's business specially, but which caught his fancy, and he then wrote to Mr. Crocker, who put him into communication with Mr. Toone.

Mr. Radcliffe said that was why he raised the defence that Cairns did not buy through the plaintiff. He bought through Mr. Crocker, who had been paid the commission.

Mr. Bell said before he went further he would read the letter of August 30 last at his learned friend's request. In this the plaintiff said: "Thanks for your note. I am sorry I could not find a suitable purchaser for the business." The explanation of that was this. Mr. Hawkins had a very large business indeed, and one which necessitated a great number of names passing through his head, so many different people applying to him and entering into negotiations. When he received the letter saying Mr. Cairns was the purchaser he forgot that Mr. Cairns had written to him, but he afterwards

recognised that that was the man he had introduced. He called two or three days afterwards on Mr. Toone, who said Mr. Cairns, having purchased the business, had stated that he (the plaintiff) was the first to introduce him to it. Mr. Hawkins said he must look into the matter, and he found out it was so, and that he was entitled to the commission. It was actually Mr. Cairns who told the vendor, and the vendor who told the plaintiffs. The plaintiff warned the defendant not to pay Mr. Crocker, and now this action had been brought to determine to whom the commission of 32*l.* was due.

Mr. Radcliffe said some of the advertisements sued for were inserted after the order was countermanded, but they would not dispute that amount—5*l.* odd—which had been paid into court.

Mr. Bell: We say not only that we introduced the man, but that we have gone to an immense amount of trouble in the matter—far more than we usually do.

Mr. Commissioner Kerr said whether the plaintiff could recover for work and labour done in trying to get a purchaser depended on the original contract.

Mr. Bell wished to point out that in July the defendant told the plaintiff not to advertise any more, while at the very same time he was authorising Mr. Crocker to insert advertisements. First of all the defendant said he would leave the matter entirely in the plaintiff's hands and then he put it into somebody else's as well. The plaintiff had been deceived and led into taking steps by an undertaking on the part of the defendant which he had not fulfilled.

Mr. Commissioner Kerr: You are not bringing your action for deceit. It is an action for commission.

Mr. Hawkins was then called, and generally bore out the statement of his counsel. His terms, he added, were not in writing on the form which the defendant signed because they were so well known to every one in the trade. He went into the merits of both businesses alluded to when Mr. Cairns called upon him. The sale by Mr. Toone to Mr. Cairns was effected within a month of his interview with the latter. Mrs. Toone called upon him coming to town, specially to ask him to do his best to sell the business, as her husband was suffering from heart disease. He had exerted himself more than ordinarily, as he felt that a semi-friendship had sprung up, and, if by his extra efforts he could have sold the business earlier, he should have been glad.

Mr. Commissioner Kerr wondered whether the words, "this will leave the matter entirely in your hands," could be construed into a retainer or anything of that sort. Upon consideration he could not say that they did.

In cross-examination, Mr. Hawkins said the defendant wrote in September, 1889, countermanding the advertisements. The terms he had mentioned were quite usual—in-deed, they were universal, and no commission was paid where no sale resulted. When Mrs. Toone called on him, she said she was implicitly relying upon his endeavours to sell the business. She did not say she would authorise no one else to sell the business. He was not taking his instructions from her, and did not know whether her husband had given her authority or not to place the matter in anyone else's hands. During the winter of 1889-90 nothing much was done in the matter, as it being the season at Bath the defendant would have the best of the profits. That was why he was not so anxious during the winter to get out of the business. In March, 1890, the defendant wrote and asked him to put it on his books again. When Mr. Cairns called he did not tell him that the West of England was very much cut up, or dissuade him from taking the defendant's business. As a matter of fact, Bath was very much improving. He should not be likely to have made the remark suggested when it was a well-known fact that Bath was increasing in general estimation. He did say that Mr. Cairns would find that the other business was the higher class of the two. He wrote on July 16, "the matter seems to hang fire very much, but I will continue my efforts."

Mr. Commissioner Kerr pointed out that the plaintiff said nothing about having mentioned the business to Mr. Cairns in that letter. There was not a word about that. He had looked at the letters, but he did not think they amounted to an employment independently to entitle him to commission.

Mr. Gibbs, the plaintiff's clerk, said he was present when Mr. Cairns called, and the plaintiff gave him full particulars of the defendant's business.

Mr. Jameson, member of the firm of Curtis & Co., chemists

and druggists, was called to speak to having had many transactions of this sort. Some of the largest businesses had been sold through his agency.

Mr. Bell said he had called the witness to state that the first introducer of the business was always paid the commission.

Mr. Commissioner Kerr said he did not care a farthing for what Messrs. Curtis & Co. thought about the judgment of the House of Lords, for they had decided that point.

Mr. Cairns, in his evidence, said in July, 1889, after having been an assistant to Messrs. Bell & Co., he was anxious to buy a business. He first heard of the defendant's business from Mr. Hills, to whom it had been mentioned by Mr. Atkins, of Salisbury. He wrote to Mr. Atkins in consequence. When he called at the plaintiff's business place he first saw the clerk, and discussed the matter with him. He was given all the particulars of the Weymouth business, and was told that it would be absolutely necessary that he should be a pharmaceutical chemist, which he was. Mr. Hawkins came in and recapitulated the clerk's figures, and promised that the statistics should be forwarded by post. He (witness) then said to the plaintiff: "You have the business of Mr. Toone's for transfer as well. What sort of a business is that?" Mr. Hawkins merely said: "You know how the West of England is cut up. You do four or five times the amount of work for the same money. I should strongly advise you to take the Weymouth business." The plaintiff gave him no particulars of the defendant's business whatever, either verbal or written. He was not introduced to the defendant by the plaintiff's instrumentality at all. He saw an advertisement in the paper, which brought him into communication with Mr. Crocker, who gave him full details. He ultimately bought the business upon Mr. Crocker's introduction. When he saw the plaintiff it was quite an after-thought that he asked about or mentioned Mr. Toone's business. When in negotiation with Mr. Toone he did not tell him that the plaintiff was the first to introduce him to the business.

Mr. Commissioner Kerr said the plaintiff having merely mentioned the business to Mr. Cairns was not enough to entitle him to commission. There must be something which would really lead to a sale. That had always been understood to be the law. The question was, was the sale the result of what the plaintiffs said?

Mr. Radcliffe said he had the defendant as well as Mr. Crocker present, but he did not think it necessary to call them.

Mr. Commissioner Kerr quite agreed. He did not think they could carry the case further than Mr. Cairns had done.

Mr. Bell submitted it was clear that the plaintiffs were the persons who first introduced the purchaser of the business to the defendant.

Mr. Commissioner Kerr, in giving judgment, said Mr. Hawkins, having an enormous business, he did not know how he could possibly recollect every person and every conversation which took place with people who came about businesses. It was not to be expected. Mr. Cairns, on the contrary, ought to have a very distinct recollection; and if his story were true, how could the plaintiffs recover? Let them confine themselves to that.

Mr. Bell, interposing, said it was clear that Cairns was introduced by the plaintiff to the business. Mr. Cairns heard of it through Mr. Atkins, who could tell him nothing about it, so he came to them and obtained the name and address of the business. They gave him full particulars and were the first introducers.

Mr. Commissioner Kerr: Hawkins says equal to "Don't you think of that business in Bath?"

Mr. Bell: If you dissuade a man it is an introduction.

Mr. Commissioner Kerr: I cannot accept that. (Laughter.) To bring a business to a man's attention and say, "Have nothing to do with it"—no, I can't hold that.

Mr. Bell: Could you say because he fairly points out its demerits that is not an introduction, simply because he said something disparaging? Surely, if he is fairly to do his business a man must point out that one business is more suitable than another.

Mr. Commissioner Kerr said when Cairns had found that the Weymouth business did not suit him he did not return to the plaintiff and say he wanted to know more about Toone's business. The inference he must draw upon that as a

matter of fact was that Cairns had abandoned all idea of it entirely. There was no doubt the plaintiff was the first agent who mentioned the business to Cairns; but the difficulty was this: Did that mention lead to the purchase? He was bound to come to the conclusion that it did not. No doubt Mr Hawkins had taken a great deal of trouble, which he was induced to do for the reasons he had stated. According to Cairns it was perfectly clear that the plaintiff's mention did not lead to the sale. He went to inquire about another business, and the reference to Toone's business was but for the moment. That view he (the learned Commissioner) thought was accepted by Hawkins, because there was no return to the mention of Toone's business. Cairns had given up all idea of having Toone's business. He was anxious to get a business, and he put himself to the trouble of going after the other business, and it was Crocker's advertisement which led to the purchase. He found as a matter of fact that Hawkins's mention—he could not call it an introduction—did not lead to the ultimate purchase of the business. As regarded the claim which had been set up for work and labour done in trying to get a purchaser for the business, the plaintiff asked to be paid a *quantum meruit* or *quantum valeat*. The view he took of the letters was that it did not amount to an engagement by Toone that Toone would pay the plaintiff for any service the plaintiff might have rendered in trying to sell the business. It would be rather an alarming thing to hold that while an agent was trying to earn his commission, if he failed, he was still entitled to be paid for his labour. The two contracts were somewhat inconsistent. Therefore, it would require a very positive and clear statement, or understanding, or agreement of some kind between the parties, that the plaintiff was to be paid for his labour independently of earning his commission. He must find for the defendant beyond the money paid into court.

Mr. Radcliffe: We have paid Mr. Crocker, and have resisted this claim from the first. I ask for costs.

Mr. Commissioner Kerr said he would grant costs, and judgment was entered in accordance with the findings.

VETERINARY COUNTER-PRACTICE.

AT the Hull County Court on Wednesday, before his Honour Judge Bedwell, Charles Kingsley, a gardener, of 55 Glasshouse Street, sued Edwin Fowler, chemist, Hesle Road, for 50*l.* damages alleged to have been sustained by him through the death of his dog, value 10*l.*, and 40*l.* for personal injuries. Mr. Hare appeared for plaintiff, and Mr. A. M. Jackson for defendant. Mr. Hare stated that about the beginning of November plaintiff went to defendant's shop, accompanied by his wife, for the purpose of obtaining a cake of coal-tar soap. He was told by the assistant that they had no soap of that description in stock, but he would, to please plaintiff, make him up two-pennyworth of something that would serve the same purpose. Shortly afterwards he returned with a bottle, which he handed to plaintiff, giving him certain instructions to the effect that he was to fill the bottle with warm water and then rub it on the dog. That was on Wednesday. On the Friday he filled the bottle with water and proceeded to rub the mixture on the dog, which was held for the purpose by his son. Plaintiff's attention was then called to the dog's condition, which was what it should not have been had the mixture been perfectly harmless. The dog was then carried to the garden, and a dose of oil administered, but within ten minutes from that time the animal was dead. Plaintiff was next struck with the condition of his own hands and those of his son, the skin being perfectly white and contracted. Ultimately they turned black, and the skin came off, so that he was for three weeks incapacitated from doing his daily work, and had to seek medical advice. He was thus caused a great amount of suffering and heavy losses in his business, and he estimated his damages personally at 40*l.* The assistant (Marshall) stated that he put three drachms of carbolic acid into a bottle for the plaintiff, and directed him to fill the bottle with warm water, and then put it into about a gallon tub, or any utensil, and wash the dog with soap. Mr. Fowler, the defendant, said that he had tried the same proportion of acid to water as supplied to the plaintiff on his own hands, and felt no ill-effects, there being only a few white patches on

his hands, which were immediately effaced on his washing his hands. By Mr. Hare: The dog was not killed by the administration of the solution. Mr. J. S. Linford, F.C.S., said the effects upon Kingsley could not have been caused by "Calvert's No. 5" (the acid supplied to the plaintiff), even if it had been used in its raw state. During the cross-examination of Mr. Linford his Honour suggested that the fleas might have become unanimous and killed the dog. Dr. Stothard said that he could not believe that the symptoms described by the plaintiff could have been caused by carbolic acid. His Honour, in delivering judgment, said that he was quite satisfied that the defendant's assistant did give improper directions and was negligent, that in consequence the plaintiff's dog had died, and that some injury had ensued to the plaintiff himself. He found a verdict for plaintiff for 5*l.*, 2*l.* for the dog and 3*l.* for himself, with costs.

THE BRAZILIAN MEAT EXTRACT CO.

IN the Queen's Bench on Monday, Mr. Justice Day and a special jury heard the case of *Le Sueur v. Viuva Claussen & Co.* The plaintiff said he had been employed by the defendants to assist Messrs. Archer, New & Co. in bringing out the Brazilian Meat Extract Co. (Limited), which purchased the defendants' meat business in Brazil, and also a concession for beef extract belonging to Messrs. Archer. Messrs. Claussen got 40,000*l.* in cash and shares, they guaranteeing the profits at 10 per cent. for two years. Nothing was lost by the guaranteee, as the profits came fully up to that figure. The plaintiff for many years had been a broker in Brazil, and his case was that, when he came to London, at the defendants' request, he assisted Mr. New. He did not introduce the purchaser, but supplied information he was able to give, and worked very hard in the matter. He was instrumental in getting the price raised from 30,000*l.* to 40,000*l.* for the defendants. The defence was that Mr. Le Sueur was employed to assist Mr. New, and he was paid 750*l.* by that gentleman, who himself got a very liberal commission. The plaintiff asserted that the 750*l.* had reference solely to Messrs. Archer & New's beef essence, which they sold for 7,500*l.*, its cost to them having been 2,500*l.*

Mr. Willis, Q.C., and Mr. Ashton Crosse were counsel for the plaintiff; Mr. Finlay, Q.C., and Mr. Gore appeared on the other side.

The jury returned a verdict for the plaintiff for 1,200*l.*

ACTION REGARDING A PATENT-MEDICINE TESTIMONIAL.— *FOX v. A. J. WHITE (LIM.).*

THIS case was heard at the Yorkshire Assizes at Leeds on December 12, 13, and 15, before Mr. Justice A. L. Smith and a special jury. The plaintiff is Mr. Richard Dacre Fox F.R.C.S. Edinburgh, M.R.C.S., L.S.A., formerly of Manchester, but now of Leeds; and the defendants, Messrs. A. J. White (Limited), are the proprietors and vendors of a patent medicine known as "Mother Seigel's Curative Syrup." Mr. E. T. Atkinson, Q.C., and Mr. Scott Fox were counsel for the plaintiff; and Mr. Waddy, Q.C., Mr. Walton, Q.C., and Mr. Robert Wallace, appeared for the defendants. Mr. Atkinson, in opening the case, said the action was brought by the plaintiff to recover damages for libel by the defendants, who were the proprietors of a mixture known as "Mother Seigel's Curative Syrup," which, if one believed everything that he saw about it, was quite sufficient to cure every ill that human life was liable to. It was an action brought under somewhat singular circumstances, because the libel complained of libelled the plaintiff as if he were dead, and described him as "the late Dr. Dacre Fox." Whether or not the defendants believed him to be dead at the time he (Mr. Atkinson) did not know; but to put all doubt at rest his client would appear in the box in the course of the case, and give evidence. Dr. Dacre Fox was a gentleman who, before the year 1886, had practised at Manchester for a good many years, and ultimately became consulting surgeon and chief medical officer to the Manchester, Sheffield, and Lincolnshire Railway, and his rooms were at 39, Piccadilly. In 1886, in consequence of his health breaking down, the plaintiff had to leave Manchester, and, unfortunately for him, his mind gave way, and for some little time he was in a lunatic asylum. He did not return to practice until 1889,

and at first he acted as assistant to a doctor in Suffolk for a few months, and afterwards came to live in Leeds, where he acted as "locum tenens" for several local medical gentlemen. In the month of May or June of the present year his attention was called to the fact that he was made the subject of an advertisement which was being sent broadcast throughout the country for the purpose of advertising this precious mixture, which was known as Mother Seigel's Curative Syrup. The advertisement in question was in the form of a pamphlet, of which there had been circulated 7,500,000 copies. It was a pamphlet which had a number of illustrations in it, showing what people were at the present time, and what they would become when they grew old unless they took a bottle of Mother Seigel's syrup. In this pamphlet there was a description of the case of a man called Perrin, who, according to his own account, and the accounts of the persons who owned this mixture, had been cured of a very terrible disease by swallowing a bottle or two of this stuff. The libel in question was headed, in large letters, "The Doctor's Terrible Mistake," and it was in this form:—

People in general are educated to have confidence in physicians. It is Hobson's choice. When they are ill they go to a doctor, under the impression that he must know what ails them, because he makes a business of it. But experience proves that doctors may be as ignorant and fallible as other folks. They certainly do quarrel continually over questions of disease, and make serious and fatal mistakes in actual practice. We cite a most interesting case by way of illustration:—In the autumn of 1887. Edward Perrin, a guard on the Manchester, Sheffield, and Lincolnshire Railway, fell ill, and soon had such strange symptoms as to greatly alarm him. He experienced difficulty in breathing, felt much pain in his chest, and threw up a great deal of phlegm. With this were developed a hollow cough, which had a very ominous and threatening sound indeed. Without further loss of time Mr. Perrin did what most of us would have done: he went to the best local doctor to obtain help. The physician carefully examined and catechised his patient, and then told him he was suffering from cataract-phthisis—in plain English, that he had consumption. "I can give you something to ease you," he added, "but I can't cure you; nobody can." With this sample of Job's comfort to think over, the poor fellow went home. Yet further symptoms soon appeared that made the case look as though the doctor was right. These were the cold chills, the sweats, the cough, the tightness across the chest, the loss of appetite, the brackish taste in the mouth, the impaired action of the stomach and liver, &c.—all these looked like a fatal lung-ailment, sure enough. By this time our friend was so scared at his condition that he set off to consult the late Dr. Dacre Fox, of 39 Piccadilly, who was then consulting physician to the railway and also to the infirmary. Dr. Fox examined the anxious guard, and then wrote out his death-warrant in the following impressive style:—"In the case of Guard Perrin. This man is evidently frightened. He is suffering from phthisis and dyspepsia. Cod-liver oil and iron are indicated."

The learned counsel read the remainder of the pamphlet which stated that "this bore out what the other doctor had said, and poor Perrin considered himself done for." "The learned physicians had started him on the road to the grave, and who, he thought, should know where a man is bound for, if they don't?" It went on to state how Perrin had been recommended to try Mother Seigel's syrup, and how three bottles had made a sound man of him. It continued:—

The reader will want to know what was the secret of this rapid fashion of getting well. If Perrin actually had consumption, it was nothing short of a miracle; but in point of cold fact he never had consumption at all. What he really suffered from was indigestion and dyspepsia, which often produce the same symptoms that mark true consumption. The doctors had blundered, and but for the accidental interference of Inspector Rippou and Mother Seigel's Curative Syrup, Edward Perrin would probably have gone to the grave as another victim to a common complaint which the wise physicians don't appear to understand.

That was the libel which he (the learned counsel) thought was justly complained of. It imputed to Dr. Dacre Fox that, after examining this man, he came to the conclusion that he was suffering from phthisis and dyspepsia, and gave him his death-warrant, whereas he was suffering from nothing of the kind. As a matter of fact, the jury would hear from Dr. Dacre Fox that he never gave Perrin any certificate, nor signed any death-warrant, and he never wrote any document corresponding to what was set out in that advertisement. Connected with the Manchester, Sheffield, and Lincolnshire Railway there was a provident society of which the men had to be members, and this man Perrin,

who entered the company's service many years ago, became a member of the society, and since 1873 he had consistently, year by year, been upon the books of this benefit society, drawing sick pay. (Mr. Waddy: Till he took the syrup.) He (Mr. Atkinson) would be able to show that notwithstanding the marvellous properties of this syrup, this man had been drawing a substantial amount of sick pay from this benefit society; therefore the syrup had not done so much as it was suggested it had done. In 1879 Mr. Perrin met with an accident at Mexborough, and in consequence of that accident he went upon the sick list, and drew sick pay. In the month of July, 1879, apparently in consequence of some doubt as to whether he was in a condition to go back to work, it was decided that he should go to Manchester to be examined by Dr. Dacre Fox, and the learned counsel read the report then drawn up by that gentleman, remarking that that was the only thing that Dr. Dacre Fox ever wrote about this man, and there was not a word in it that he was suffering from incipient consumption. In the libel it was stated that all this occurred in the autumn of 1887. Dr. Dacre Fox left Manchester in 1886, and the report which he had read was written in 1879. The defendant's solicitors, in a letter dated the 16th July last, said that an error had been made in the date, and that it was the autumn of 1877 instead of 1887, but he would show from a statement taken down from Perrin's own lips, that it was 1887 that was referred to, and that there was no possible mistake about the matter. He believed that, before the case was over, he would be able to throw some light upon these cases of sudden cures by this mixture, and the reasons why people allowed statements to be made. He thought it would turn out that Mr. Perrin, who was the subject of the advertisement, undoubtedly had some interest in making out as strong a case as possible for the purpose of benefiting "Mother Seigel's Syrup." This was a case in which the plaintiff was entitled to recover substantial damages. The defendants had made use of this case for the purpose of increasing the consumption of this mixture, and it would only be scanty justice to Dr. Dacre Fox that they should pay over to him some of the profits which they had made by the circulation of this libel.

James Taylor, secretary of the Manchester, Sheffield, and Lincolnshire Railway Provident Society, said Perrin was, in consequence of injuries he sustained in a railway accident at Mexborough, on the books of the society from May 26 to July 20, 1879. In 1887-88 he drew 4l. 6s. 4d. in sick pay in respect of an accident at Wakefield. He last received sick pay in November of this year. Cross-examined by Mr. Waddy, the witness said Perrin saw Dr. Fox on July 16, 1879, after the Mexborough accident. The entry on the books with regard to Perrin's nearest in date to the date of that visit was July 21, and it stated "injury to sternum: recovery (dyspepsia and incipient phthisis)." It was the result of Dr. Sykes's examination which was entered in the books. In March, 1880, there was another entry, "incipient phthisis," but that was not taken from a report of Dr. Fox's.

The plaintiff, Richard Dacre Fox, was then called, and in reply to Mr. Atkinson, said he examined Perrin in 1879, and reported on his case to the secretary of the Provident Society. Except that, he had given no opinion with regard to Perrin in 1879. He never gave any document to Perrin. He never wrote any document containing the statement, "In the case of the guard Perrin, this man is evidently frightened. He is suffering from phthisis and dyspepsia. Cod-liver oil and iron are indicated."

By Mr. Waddy: He dared say Perrin did consult him in 1878. He did not diagnose phthisis. He never sent a certificate to Dr. Sykes stating that Perrin was suffering from phthisis and dyspepsia. Mr. Waddy then quoted from the plaintiff's answers to interrogatories made in August, 1890, the statement, "I am unable to state whether I found Perrin suffering from phthisis or dyspepsia, &c.," and asked him to account for the discrepancy. Plaintiff said he was unable to do so. When he examined Perrin he found him suffering from extreme weakness, congestion of the apex of the lungs, and the usual symptoms of preliminary phthisis. He was a very delicate man, and these were frequently the premonitory symptoms of incipient phthisis. His report described the symptoms of phthisis, but he never used either that word or the word consumption. He saw his report before making the answers to interrogatories.

The man had several symptoms of incipient phthisis. The publication of the alleged libel by the defendants had done him injury in his profession. He had not since 1886, when his health broke down, been in a position to support his wife and family.

Mr. Atkinson then put in defendant's answers to interrogatories and other documents, and closed his case.

Mr. Waddy, for the defence, said the question was whether or not the document quoted by the defendants was given by Mr. Fox. But the jury must have seen with regard to this very statement of which Dr. Fox complained that he had practically admitted it in the witness-box. Much had been said about the printer's error of ten years, but the matter had been explained, and the date was really of no importance. He would prove that the document in question was sent by Dr. Fox to Dr. Sykes, and given by Dr. Sykes to Perrin, who told the defendants of its existence. Perrin had lost the document, for until these proceedings arose he did not attach much importance to it, but in August it became important to ascertain whether Dr. Fox would acknowledge it. He was accordingly asked in the interrogatories whether or not he gave the document, and he actually swore that he was unable to say whether he did or not. He now said he never gave it, and his only excuse for the discrepancy was that he had since seen his report—a report which had no hearing whatever on the document in question. Dr. Sykes, who was not called by the plaintiff, and who, if anybody, was the person chiefly attacked, had been attending Perrin, and had time after time certified him to be suffering from incipient phthisis. Dr. Sykes had told Perrin he could not be cured, and this led him to consult Dr. Fox. He told Dr. Fox what his symptoms were, as described by Dr. Sykes, and Dr. Fox confirmed what Dr. Sykes had said. It was true Dr. Fox did not use the word phthisis in his report, but that was unnecessary, because he was asked whether Perrin had symptoms of phthisis. He had admitted that he thought Perrin was suffering from incipient phthisis, and in his report he described the symptoms if he did not use the expression. He would urge that defendants had made a legitimate comment upon what had been proved to be true, and had done nothing beyond the fair limits of advertising. He then called

Levi Todd, chemist, and agent at Manchester for the defendant, who said he took down Perrin's statement in August, 1889. Perrin then said that he had been a strong man up to the time of the Wakefield accident in 1887. In reply to Mr. Atkinson, witness admitted that in sending his report on Perrin's statement to the defendants he wrote, "I have kept within substantial facts. You can make them as strong as you like!"

Edward Perrin, who was next called, said that Dr. Sykes told him after the Mexborough accident that he was consumptive, but he thought he was not because none of his family had been consumptive, and on the 16th July, 1879, he consulted Dr. Dacre Fox. Mr. Fox asked him what Dr. Sykes had said, and he told him, when he replied, "Oh, it's a mistake; a bottle or two will put you right." Next day he saw Dr. Sykes, who showed him a letter he had received from Dr. Fox. On reading the letter, witness said Dr. Fox must be a fool. (Laughter.) The document read as follows:—"Phthisis, dyspepsia, and 'Rhumbo.' (Laughter.) Cod-liver oil and iron indicated. Not fit for railway work; wants some light occupation, where he can get his meals regularly. Happy to see you soon.—Yours truly, Dacre Fox." Witness took the letter and kept it for some years, showing it to several persons, but eventually lost it. He took the cod-liver oil and iron, but got worse; and, in consequence of what Inspector Rippon said, he commenced to take "Mother Seigel's Curative Syrup," which did him a great deal of good, and finally cured him. He was three stones heavier now than when he went to see Dr. Fox.

In reply to Mr. Atkinson, he admitted having received from the defendants two remittances of 2*l* each for disbursements in postages and stationery. On March 20, 1890, he wrote to defendants saying the time had now arrived when they should confer something on him for the trouble he had had in answering letters, and—"for the satirical remarks made personally and privately in regard to the tone of the advertisement. . . . I had no idea you would have gone so far in the matter when your representative waited on me." In the same letter witness offered to distribute their printed matter

on his journeys through the country. In reply, he got a remittance of 3*l*, but he wrote back asking Mr. White to increase the grant to 10*l*, and on April 9, he got a further remittance of 7*l*, making a total of 14*l*. He did not inquire whether Dr. Fox was dead; he heard people say so. He believed he informed Mr. Todd that Dr. Fox was dead. Mr. Atkinson: "Do you suggest that Seigel's Syrup has cured you?" Witness: "I believe it has." "And that you are a man that is hale and hearty?" "Yes." "How many bottles were sufficient to cure you?" "Three or four bottles." "Did you spit blood?" "I believe I did." "Can you swear to it?" "I think I can." "You said you had paroxysms of coughing when you went to bed?" "I had bad bouts." "Had you chills and cold sweats?" "Yes; but I cannot say whether it was at that time." "Did you have great pain after eating, and feel tight in the chest?" "Yes, I did." To his Lordship: "A heavy supper might bring it on." (Laughter.) He did not tell Todd that he had asthma. He was not in a fit condition to make a statement when Todd came to him. He had the "Neurology." (Laughter.) He told him his breath was bad, but not that he had asthma. He never told him he had taken gallons of cod-liver oil and sherry, and that his wife had rubbed him with camphor oil till she was sick of it. That was where the flourish came in. (Loud laughter.) It was not true that he told Dr. Walker that he had been cured by Seigel's Syrup, and that the doctors did not seem very pleased. He also denied that he ever went to his doctor (as stated in the advertisement), told him of his cure, and that the doctor said it was all rubbish, and simply a quack medicine. He had had influenza and neuralgia, but did not take the Syrup for these. Mr. Atkinson: "You have had hernia?" Witness: "Yes. But it does not cure hernia." (Laughter.) "Do you know what it does cure?" "Yes, indigestion." "Nothing else?" "I don't know." "It cures rickety children, does it not?" "Yes, I believe it will." Mr. Atkinson then enumerated a number of occasions on which the witness had been away from work, and asked him if he considered it right and fair to put in the advertisement that he was hale and hearty. Witness: "I will eat a pound of beefsteak with anybody." (Laughter.) Mr. Atkinson: "I daresay you will, and have tightness of the chest afterwards." (Laughter.)

Eleanor Perrin, wife of the last witness, spoke as to her husband having taken Seigel's Syrup at her instance, and having derived good from it. Previously he had taken a great deal of cod-liver oil, without improving in health. She used to fetch the cod-liver oil, and used to go for it so frequently, that the neighbours used to call her "tons of cod-liver oil." (Laughter.) Mr. Day, station-master, Thomas Eckford, guard, and Thomas D. Turner (brother-in-law of Perrin) gave evidence as to having seen the letter alleged by Perrin to have been written by Dr. Fox. John Rippon, a traffic inspector in the employ of the Manchester, Sheffield, and Lincolnshire Railway Company, gave evidence as to advising Perrin to take Seigel's Syrup, and said that it had improved his health.

His Lordship in summing up the case said it had been alleged that the plaintiff had unskillfully diagnosed a complaint, and that the result was the setting of a patient on the high road to the grave. If the jury thought that want of care had been implied, they must give a verdict for the plaintiff. Though the defendants' answer to the charge rested on several points, the chief one was an admission that they had made the assertions which were said to have been a libel, and that those statements were substantially accurate. Of course, if the defendants had proved the allegations to be true, the verdict must be for them. The burden of proving the written and published words to be true rested with the defendants. His Lordship then directed the attention of the jury to the letter which was said to have been written to Dr. Sykes by the plaintiff, in regard to Perrin's case, and with respect to which the alleged libel arose. If the jury were satisfied that the plaintiff did not write that communication to Dr. Sykes, there was an end of the defendants' case. After all, the main question was, "Had there been a wrong diagnosis?" The jury, after an absence of twenty minutes, gave a verdict for the plaintiff, damages 1,000*l*. On the application of Mr. Atkinson, his Lordship gave judgment, and certified for a special jury. Mr. Waddy asked for a stay of execution. His Lordship said he would think about it.

FOX v. A. J. WHITE (LIMITED).—STAY OF EXECUTION.

Yesteray (Thursday), in the Court of Appeal, Mr. Kisch, on behalf of the defendants in the case of *Fox v. A. J. White (Limited)*, applied to the Master of the Rolls and Lords Justices Lopes and Kay for a stay of execution pending an appeal from the judgment of Mr. Justice Lawrence on trial at Leeds, on the ground of excessive damages. Plaintiff had been out of practice for three years, and defendants urged in these circumstances 1,000*l* damages for the libel was excessive; but, if their lordships so directed, they were ready, in order to show their *bona fides*, to pay the money into court.

Mr. Blake Olders opposed the application on the ground that malice was apparent in the interrogatories filed in the case, and that the jury were the best judges of the facts, besides which the judge who tried the case refused stay.

After hearing the arguments at some length, and going through the evidence on the trial, their lordships ordered a stay, on payment of the money into court.

THE APOLLINARIS COMPANY'S TRADE MARKS.—
JUDGMENT.

IN the Court of Appeal, on Thursday, constituted by Lords Justices Lindley, Bowen, and Fry, Lord Justice Fry delivered the considered judgment of the court in *re* the Apollinaris Company, ex parte Messrs. Ingram & Royle, from orders made by Mr. Justice Kekewich in July last. His lordship said the first judgment related to trade-marks numbered 6,356, 6,357, and 9,026 respectively, and registered for Hunyadi Janos water. Mr. Justice Kekewich refused to rectify the trade-mark register, and with regard to this application two questions arose: first, whether the Vichy Company were "aggrieved persons" within the meaning of the section of the Trade-marks Act, 1875; and, secondly, whether the marks ought to be removed from the register. The spring from which this natural mineral water was obtained was the property of one Saxlehner, who, down to 1876, made sales to various persons, including Messrs. Ingram & Royle, in England, the predecessors in business of the Vichy Company. In 1876 a contract was made between Saxlehner and the Apollinaris Company, and Saxlehner refused to execute orders for England, and after the date of the contract Messrs. Ingram & Royle purchased from the Apollinaris Company. In the same year, and after the date of the contract, the trade-marks in question were registered in England by the Apollinaris Company. In 1885 Messrs. Ingram & Royle sold their business to the Vichy Company, and shortly afterwards the Apollinaris Company refused to supply the Vichy Company. Messrs. Ingram & Royle thereupon got their waters elsewhere, but the Apollinaris Company, relying on their trade mark, stopped them; and they were also stopped from getting a supply of artificial Hunyadi Janos and lozenges made from the salts of that water and manufactured for sale in this country. From the evidence it appeared from the general course of trade that the Vichy Company could get small supplies from abroad, and that they would have increased their trade if they had not been stopped by the Apollinaris Company. Then was the Apollinaris Company properly on the register? This question must be determined by their *locus standi*. With regard to the first question the court came to the conclusion that where a trader by means of wrongfully-registered trademarks narrowed the business of a rival or excluded a rival from carrying on a portion of his trade, that rival was an "aggrieved" party; and, again, where the effect was not the exclusion but the probable exclusion of a rival, then that rival was an "aggrieved" person within the meaning of the Act; and having regard to the evidence his lordship considered that the Vichy Company were "aggrieved" parties. His lordship then proceeded to deal with the merits of the registered marks. Mark No. 9,026 was abandoned; and with reference to Nos 6,356 and 6,357 they did not distinguish the water sold by the Apollinaris Company from any other water supplied by Saxlehner, and the arrangement in 1878 by the owners of the spring did not justify the Apollinaris Company registering a mark new to them, though old to Saxlehner, and a mark to which they

had not the exclusive use. The marks 6,356 and 6,357 must therefore be removed from the register, and the appeal allowed with costs. His lordship then proceeded to deal with marks Nos. 2,076 and 4,122, registering the words Apollinaris and Apollinaris Brunnen, and, coming to the conclusion that the Apollinaris Company had not at the time of their registration exclusive use, also allowed the appeal with costs. The next marks considered were Nos. 45,096 and 45,097, relating to the word Friedrichshall. In this case the Apollinaris Co. were the owners of a contract with the owners of the German spring, purporting to grant them the sole right of selling the water in Great Britain and the Colonies. The owners bound their continental customers not to export the water from the Continent, and a caution to this effect was printed on the labels. Mr. Justice Kekewich refused to rectify the register in the court below, but Lord Justice Fry, holding that the Vichy Co. were "persons aggrieved" here also, and that the mark was improperly on the register, allowed the appeal with costs.

The Attorney-General applied for costs on the higher scale, but the application was refused.

Trade Notes.

MESSRS. DAKIN BROS., wholesale druggists, of Creechurch Lane, E.C., have been compelled, owing to the rapid increase of their business, to take the lease of another warehouse adjoining their present one. The two buildings are now being united into one warehouse.

EWEN'S SPECIALITIES.—Through an accident in printing we find that certain trade-marks for page 404 of our DIARY for 1891, which is an advertisement of lard and soaps by Messrs. James Ewen & Sons, 5 Hatfield Street, Blackfriars, S.E., were omitted. Consequently the address of the firm did not appear in the advertisement.

HERBAL DROPS.—Attention may be called to an offer made among our advertisements by Mr. James Pascall, the manufacturing confectioner, of Blackfriars Road, who offers to supply his herbal drops—which are simple, pleasant, and effective cough-drops—in tins labelled with a chemist's name and address, in gross lots on low terms.

MR. W. A. GILLIGAN, who has made a business visit to the United States in the interest of Liebig's Extract of Meat Company (Limited), of 9 Fenchurch Avenue, E.C., and of Messrs. Corneille David & Co., of the same address, who are the selling agents for Liebig's, returned home on the 11th instant, per s.s. *Aller* from New York.

THE WEIGHTS AND MEASURES ACT.—The London County Council had this matter before it on Tuesday, when it was reported, that with a view to carrying out the Act, a large staff of competent inspectors and assistants had been appointed, and offices were ready in various parts of London. Just now the offices are very busy, for tradesmen are coming on in a rush at the eleventh hour. In order to save traders the expense of a scalemaker, provision is made at the various offices for stamping.

WINTER DRINKS.—Messrs. De Carle & Son, of Norwich, are bringing prominently before the trade this season a line of "winter beverages," which will, we should think, be as popular as they are cheap. The idea is the same as that of their solid fruit juices, the beverages taking the form of agreeably flavoured and coloured crystals which are to be dissolved with sugar in boiling water to make a cordial. This cordial, added to hot or cold water, makes a comforting and refreshing drink. There can be no suspicion of alcohol about these beverages, and the flavours are good and seasonable.

A TROUBLESOME CUSTOMER.—On December 11 Mary Johnson went into the shop of Mr. Thomas Field, a chemist, in the Borough, and asked him for a penny. Being refused she smashed a glass shelf and did 10*s.* worth of damage. Before the magistrate next morning she believed so strangely that she was remanded for a week, so that the prison medical officer might examine her.

TRADE-MARKS APPLIED FOR.

THE *Trade Marks Journal* publishes the following notice:—"Any person who has good grounds of objection to the registration of any of the following marks may, within one month of the date of this journal, give notice in duplicate, at the Patent Office, in the form 'J,' in the second schedule to the Trade Marks Rules, 1890, of opposition to such registration." All communications to be addressed to H. Reader Laek, Esq., Comptroller General, at the Patent Office, 25 Southampton Buildings, Chancery Lane, London, W.C.

From the "Trade Marks Journal," December 3, 1890.

Picture of two foxes, huntsman's horn and spurs, with wording, on circular label; for a veterinary and sanitary lotion. By C. Mitchell & Co., 5 Frampton Park Road, Hackney, N.E. 99,603.

"GILLARD'S SPECIFIC" and "GILLARD'S COMPOUND," other wording, and signature; for a dog-medicine. By F. Gillard, Belvoir Kennels, Grantham. 150,562, 150,563.

"NO CURE, NO PAY," and signature; for cattle-medicine. By G. F. Dawes, 31 Northgate Street, Bury St. Edmunds. 150,976.

"CASTLE GRAND QUININE SHERRY," other wording, and signature; for quinine sherry. By W. & A. Gilbey, 173 Oxford Street, London. 98,165.

"LAVENDER SALTS SOAP" and monogram; for soaps for use in medicine and pharmacy, and toilet soaps. By G. H. Comfort, South Woodford, Essex. 150,622, 150,623.

"ECUMENICAL FULLER'S EARTH SOAP"; for perfumed and common fuller's-earth soap. By Lewis Vigis, 12 Chapel Row, Bath. 98,688, 99,410, 99,411.

"THE SCENT OF THE MOORLAND" and landscape picture; for a perfume. By T. W. Cairnie, trading as G. Vogt & Co., 19 Laurence Pountney Lane, London. 99,655.

From the "Trade Marks Journal," December 10, 1890.

"PASKAR"; for medicine for human use. By Florence E. Hodgson, Abermarl Cottage, Cheshunt, Herts. 150,093.

"NURSE DAVY'S FEMALE REMEDIES"; for medicines. By E. M. A. Davy, 87 St. John's Road, Upper Holloway, London. 151,115.

"CLEOPATRA'S OINTMENT"; for an ointment for human use. By G. Dreossi, 2 Haven Green, London. 151,205.

Representation of bust of female on pedestal; for mineral and aerated waters. By W. S. Dove, High Street, Rochester. 150,883.

"LUCILLE"; for lubricating-jelly and perfumery. By Bosshardt and Wilson, 212 South Third Street, Philadelphia, U.S.A. 151,379, 151,380.

From the "Trade Marks Journal," December 17, 1890.

"PRITCHARD'S AUSTRALIAN, &c., PANACEA," and black label, with coat of arms and picture of animals; for veterinary mixture for external use. By E. C. Pritchard, Old Manor Farm, East Clandon, Surrey. 97,168.

"DALMA POWDER," and other wording, on label; for an insecticide. By Wilkinson & Simpson, 24 Newgate Street, Newcastle-on-Tyne. 98,943.

"HAWLEY'S DALMATIAN INSECT POWDER"; for an insect-killer. By Evans, Lcscher & Webb, trading also as Hawley & Co., 60 Bartholomew Close, London. 99,327.

"PILLOLE DI CATRAMINA"; for pill of essence of tar for human use. By A. Bertelli & Cia., Milan, and Irvine, Hodges & Co., 8 Hart Street, Mark Lane, London. 90,522.

"PNEUMONIC," and other wording; for a cough-demulcent. By H. Payne, 13 Queen Street, Market Rasen. 150,037.

"REECE'S ZEMA SKIN SOAP"; for a medicated soap. By Reece & Co., 168 Piccadilly, London. 150,258.

"LOSER JÁNOS," and other wording, with portrait, on label, for mineral waters. By Loser János, Buda Pesth Austria Hungary. 97,164.

"AERATED LIME JUICE," and circular design surrounding three hands grasping lightning darts; for an aerated beverage. By William McDonnell, Corbally, Limerick. 151,247.

Illustration showing page-boy presenting glass of water; for natural mineral water. By the West-end Table-water Company, 303 High Holborn, London. 151,695.

"TALPHITE"; for perfumery and toilet articles. By W. R. Dodd, St. Andrew's Pavement, Stamford Hill, London. 150,625.

"ALADDIN"; for toilet and perfumed soap, &c. By the Liverpool Patent Soap Company (Limited), Fenwick Chambers, Liverpool. 151,201.

Sketch of screw-propeller; for perfumery and toilet articles. By J. Crosfield & Sons, Warrington. 151,320.

Personalities.

MR. JOS. WORMALD, wholesale druggist, has removed from 81 Shudehill, Manchester, to more commodious premises, 40 Dantzic Street, City.

MR. HARRY MARKS, the founder and principal owner of the *Financial News*, was, it appears, at one time "one of us." In giving an outline of his life in the witness-box, in the recent libel suit which he brought against Mr. Butterfield, he said he went to America alone at the age of fifteen. His father had friends in New Orleans. He went into a wholesale drug house in New Orleans, and part of the time he did their French and German correspondence, or assisted in it, and the rest of the time he was in the laboratory. From there he went to Texas, and got employment as a canvasser for sewing-machines and driver of a mule-team for the sewing-machine agent. His literary career began in 1872 as editor of the *San Antonio Daily Express*. He afterwards worked for the *Galveston Bulletin*, the *New Orleans Picayune*, and the *New York World*.

MR. BURROUGHS GIVES A PARTY.—On Thursday Mr. and Mrs. S. M. Burroughs had the City staff of Messrs. Burroughs, Wellcome & Co., by invitation, to an evening party in Holborn Town Hall. With some friends the company of ladies and gentleman numbered about 200, and were received by the host and hostess at 7 o'clock. Each one on entering received a pretty little card of the concert and dances. Tea and coffee were served between 7 and 7.30, and up till 9 o'clock the time was spent in conversation, a dozen pieces of music being thrown in, Mrs. F. W. Mattox and Messrs. John A. E. Siller (pianoforte), F. Bull, Lionel Levy, and E. J. Reid (Burgoyne, Burbidges & Co.) rendering excellent service in this department. Dancing commenced shortly after nine, Mr. Astill holding the reins, and two hours were very pleasantly spent in this way. Altogether the evening was an exceedingly enjoyable one, and Mr. and Mrs. Burroughs had their reward in the pleasure which beamed on the faces of their guests.

MARRIAGE.

[Notices of Marriages and Deaths are inserted free if sent with proper authentication.]

LUNAN—MILNE.—On December 10, at Banchory, by the Right Rev. Dr. Hutchison, minister of the parish, George Lunan, pharmaceutical chemist, Edinburgh, to Cissy, younger daughter of James Milne, Esq., of Oakwood.

NEVER WEAR celluloid artificial eyes. They gradually change in composition and cause intense irritation.

SALE OF GOODS BILL.

AS DRAFTED BY HIS HONOUR JUDGE CHALMERS.
(Continued.)

PART II.—EFFECTS OF THE CONTRACT.

Transfer of Property as between Seller and Buyer.

19. *Goods must be ascertained.*—Where there is a contract for the sale of unascertained goods, no property in the goods is transferred to the buyer unless and until the goods are ascertained.

20. *Property passes when intended to pass.*—(1) When there is a contract for the sale of specific or ascertained goods, the property in them is transferred to the buyer at such time as the parties to the contract intend it to be transferred.

(2) For the purpose of ascertaining the intention of the parties regard shall he had to the terms of the contract, the conduct of the parties, and the circumstances of the case.

21. *Rules for ascertaining intention.*—Unless a different intention appears, the following are rules for ascertaining the intention of the parties as to the time at which the property in the goods is to pass to the buyer.

Rule 1.—When there is an unconditional contract for the sale of specific goods, in a deliverable state, the property in the goods passes to the buyer when the contract is made, and it is immaterial whether the time of payment or the time of delivery, or both, be postponed.

Rule 2.—Where there is a contract for the sale of specific goods and the seller is bound to do something to the goods, for the purpose of putting them into a deliverable state, the property does not pass until such thing be done.

Rule 3.—Where there is a contract for the sale of specific goods in a deliverable state, but the seller is bound to weigh, measure, test, or do some other act or thing with reference to the goods for the purpose of ascertaining the price, the property does not pass until such act or thing be done.

Rule 4.—When goods are delivered to the buyer on approval or on "sale or return" or other similar terms the property therein passes to the buyer:—

(a) When he signifies his approval or acceptance to the seller, or does any other act adopting the transaction.

(b) If he does not signify his approval or acceptance to the seller, but retains the goods without giving notice of rejection, then, if a time has been fixed for the return of the goods, on the expiration of such time, and, if no time has been fixed, on the expiration of a reasonable time. What is a reasonable time is a question of fact.

Rule 5.—(1) Where there is a contract for the sale of unascertained or future goods by description, and goods of that description and in a deliverable state are unconditionally appropriated to the contract, either by the seller with the assent of the buyer, or by the buyer with the assent of the seller, the property in the goods thereupon passes to the buyer. Such assent may be express or implied, and may be given either before or after the appropriation is made.

(2) Where, in pursuance of the contract, the seller delivers the goods to the buyer or to a carrier or other bailee (whether named by the buyer or not) for the purpose of transmission to the buyer, and does not reserve the right of disposal, he is deemed to have unconditionally appropriated the goods to the contract.

The following are comments by Judge Chalmers' on the two preceding clauses:—

The object of the contract of sale is the transfer of the property in goods from one person to another for a price. According to Scotch law, which follows the Roman law, the ownership is not transferred till the buyer obtains possession. Until then, there is only a contract to transfer the ownership. But, by English law, the ownership passes at such time as the parties intend it to pass. The contract itself may suffice to change the ownership, without any change of possession. If the parties are agreed about the goods, and express their intention clearly, no difficulty arises.

But this is very seldom the case. If you order a suit of clothes from your tailor, you don't think of agreeing the moment at which those clothes are to become yours instead of the tailor's. Yet the question may be important: suppose the clothes are destroyed by accidental fire, who is to bear the loss, you or the tailor? Again, suppose the carrier delivers the goods to the wrong person. If the property has passed, you may be able to claim the clothes from that person; if it has not passed he has not got your clothes—he has got the tailor's, and the tailor only can claim them from him.

22. *Reservation of right of disposal.*—(1) Where there is a contract for the sale of specific goods or where goods are subsequently appropriated to the contract, the seller may, by the terms of the contract or appropriation, reserve the right of disposal of the goods until certain conditions are fulfilled. In such case, notwithstanding the delivery of the goods to the buyer, or to a carrier or other bailee for the purpose of transmission to the buyer, the property in the goods does not pass to the buyer until the conditions imposed by the seller are fulfilled.

(2) When goods are shipped, and by the bill of lading the goods are deliverable to the order of the seller or his agent, the seller is *prima facie* deemed to reserve the right of disposal.

(3) When the seller of goods draws on the buyer for the price, and transmits the bill of exchange and bill of lading to the buyer together to secure acceptance of the bill, the buyer is bound to return the bill of lading if he does not accept the bill of exchange, and if he wrongfully retains the bill of lading the property in the goods does not pass to him.

23. *Risk prima facie passes with property.*—Unless otherwise agreed, the goods remain at the seller's risk until the property therein is transferred to the buyer, but when the property therein is transferred to the buyer, the goods are at the buyer's risk whether delivery has been made or not.

Provided that where delivery has been delayed through the default of either buyer or seller the goods are at the risk of the party making default as regards any loss which would not have occurred but for such default.

Provided also that nothing in this section shall affect the duties or liabilities of either seller or buyer as a bailee of the goods of the other party.

Transfer of Title.

24. *Sale by person not the owner.*—(1) Subject to the provisions of this Act, where goods are sold by a person who is not the owner thereof, and who does not sell them under the authority or with the consent of the owner, the buyer acquires no better title to the goods than the seller had, unless the owner of the goods is by his conduct precluded from denying the seller's authority to sell.

(2) Provided also that nothing in this Act shall affect—

(a) The provisions of the Factors' Acts, or any enactment enabling the apparent owner of goods to dispose of them as if he were the true owner thereof;

(b) The validity of any contract of sale under any special common law, or statutory power of sale, as in the case of a sale by a pawnee, distrainer, sheriff, master of a ship, or person selling under the order of a court of competent jurisdiction.

25. *Market overt.*—(1) Where goods are sold in market overt, according to the usage of the market, the buyer acquires a good title to the goods provided he buys them in good faith, and without notice of any defect or want of title on the part of the seller.

(2) Nothing in this section shall affect the provisions of this Act relating to the sale of horses.

The rule as to market overt does not apply in Scotland; but it applies to all sales made in the City of London between sunrise and sunset. Thus, if a person innocently buy a watch in the City between sunrise and sunset, and it is proved afterwards that the vendor had no right to sell it, the buyer cannot be compelled to surrender it. Elsewhere, except in ancient markets and fairs, his possession is not guaranteed.

26. *Sale under voidable title.*—When the seller of goods has a voidable title thereto, but his title has not been avoided at the time of the sale, the buyer acquires a good title to the goods provided he buys them in good faith, and without notice of the seller's defect of title.

27. *Restoring of property in stolen, &c., goods on conviction of offender.* [Cf. 24 § 25 Vict. c. 96, s. 100]—Where goods have been stolen, or otherwise wrongfully obtained, from the

person who was the owner thereof by means amounting to an offence under the Larceny Act, 1861, and the offender is prosecuted to conviction, the property in the goods so stolen or wrongfully obtained thereupon vests in the person who was the owner of the goods, or his personal representative, notwithstanding any intermediate dealing with them, whether by sale in market overt or otherwise.

28. [52 & 53 Vict. c. 45, s. 8.]—(1) Where a person, having sold goods, continues or is in possession of the goods, or of the documents of title to the goods, the delivery or transfer by that person, or by a mercantile agent acting for him, of the goods or documents of title, under any sale, pledge, or other disposition thereof, to any person receiving the same in good faith and without notice of the previous sale, shall have the same effect as if the person making the delivery or transfer were expressly authorised by the owner of the goods to make the same.

[52 & 53 Vict. c. 45, s. 9.]—(2) Where a person having bought or agreed to buy goods obtains with the consent of the seller possession of the goods or the documents of title to the goods, the delivery or transfer, by that person or by a mercantile agent acting for him of the goods or documents of title, under any sale, pledge, or other disposition thereof, to any person receiving the same in good faith and without notice of any lien or other right of the original seller in respect of the goods, shall have the same effect as if the person making the delivery or transfer were a mercantile agent in possession of the goods or documents of title with the consent of the owner.

(3) The provisions of this section shall be construed with and subject to the provisions of the Factors Acts.

29. *Effect of writs of execution.* [29 Car. 2, c. 3, s. 15]—(1) A writ of fieri facias, writ of attachment, or other writ of execution against goods shall bind the property in the goods of the execution debtor as from the time when the writ is delivered to the sheriff to be executed; and, for the better manifestation of such time, it shall be the duty of the sheriff, without fee, upon the receipt of any such writ to endorse upon the back thereof the day, month, and year when he received the same.

[19 & 20 Vict. c. 97, s. 1.]—Provided that no such writ shall prejudice the title to such goods acquired by any person in good faith and for valuable consideration, unless such person had at the time when he acquired his title notice that such writ or any other writ by virtue of which the goods of the execution debtor might be seized or attached had been delivered to and remained unexecuted in the hands of the sheriff.

PART III. PERFORMANCE OF THE CONTRACT.

30. *Duties of seller and buyer.*—It is the duty of the seller to deliver the goods, and of the buyer to accept and pay for them, in accordance with the terms of the contract of sale.

31. *Payment and delivery are concurrent conditions.*—Unless otherwise agreed, delivery of the goods and payment of the price are concurrent conditions—that is to say, the seller must be ready and willing to give possession of the goods to the buyer in exchange for the price, and the buyer must be ready and willing to pay the price in exchange for possession of the goods.

32.—*Rules as to delivery.*—(1) Unless otherwise agreed, it is the duty of the buyer to take possession of the goods; and the seller's duty to deliver the goods is satisfied by his affording to the buyer reasonable facilities for taking possession of the goods at the place where they are at the time the contract of sale is made, or in the case of goods to be manufactured, at the place of manufacture.

(2) Where, under the contract of sale, the seller is bound to send the goods to the buyer, but no time for sending them is fixed, the seller is bound to send them within a reasonable time. What is a reasonable time is a question of fact.

(3) The delivery of the key of the place where the goods are may, by agreement, operate as a delivery of the goods.

(4) Where the goods at the time of sale are in the possession of a third person, there is no delivery by seller to buyer unless and until such third person attorns to the buyer; provided that nothing in this section shall affect the operation of the issue or transfer of any document of title to goods.

(5) Demand or tender of delivery may be treated as ineffectual unless made at a reasonable hour.

(6) Unless otherwise agreed the expenses of and incidental to delivery must be borne by the seller.

33. *Delivery of wrong quantity.*—(1) Where the seller delivers to the buyer a quantity of goods less than he contracted to sell, the buyer may reject them, but if the buyer accepts the goods so delivered he must pay for them at the contract rate.

(2) Where the seller delivers to the buyer a quantity of goods larger than he contracted to sell, the buyer may accept the goods included in the contract and reject the rest, or he may reject the whole. If the buyer accepts the whole of the goods so delivered he must pay for them at the contract rate.

(3) Where the seller delivers to the buyer the goods he contracted to sell mixed with goods of a different description not included in the contract, and the buyer cannot sever the goods included in the contract from the other goods without incurring trouble or expense, he may reject the whole.

34. *Instalment deliveries.*—(1) Unless otherwise agreed, the buyer of goods is not bound to accept delivery thereof by instalments.

(2) Where there is a contract for the sale of goods to be delivered by stated instalments, which are to be separately paid for, and the seller makes defective deliveries in respect of one or more instalments, or the buyer neglects or refuses to take delivery of or pay for one or more instalments, it is a question in each case depending on the terms of the contract, and the circumstances of the case, whether the breach of contract is a repudiation of the whole contract, or whether it is a severable breach giving rise to a claim for compensation, but not to a right to put an end to the whole contract.

35. *Delivery to carrier.*—(1) Where under a contract of sale, the seller is authorised or required to send the goods to the buyer, delivery of the goods to a carrier, whether named by the buyer or not, for the purpose of transmission to the buyer, is *prima facie* deemed to be a delivery of the goods to the buyer.

(2) Unless otherwise authorised by the buyer, the seller must take such steps as may be reasonable for making the carrier responsible to the buyer for the safe custody and carriage of the goods. If the seller omits so to do, and the goods are lost or damaged in course of transit, the buyer may decline to treat the delivery to the carrier as a delivery to himself.

36. *Risk where goods are delivered at distant place.*—Where the seller of goods agrees to deliver them at a place other than that where they are when sold, or where they have been manufactured, the buyer must, unless otherwise agreed, take any risk of deterioration in the goods necessarily incident to the course of transit.

37. *Buyer's right of examining the goods.*—(1) When goods are delivered to the buyer, which he has not previously examined, he is not deemed to have accepted them unless and until he has had a reasonable opportunity of examining the goods for the purpose of ascertaining whether they are in conformity with the contract.

(2) Unless otherwise agreed when the seller tenders delivery of goods to the buyer, he is bound, on request, to afford the buyer a reasonable opportunity of examining the goods for the purpose of ascertaining whether they are in conformity with the contract.

38. *Acceptance.*—the buyer is deemed to have accepted the goods when he intimates to the seller that he has accepted them, or when the goods have been delivered to him, and he does any act in relation to them which is inconsistent with the ownership of the seller, or when after the lapse of a reasonable time, he retains the goods without intimating to the seller that he has rejected them.

39. *Buyer not bound to return rejected goods.*—Unless otherwise agreed, where goods are delivered to the buyer, and he refuses to accept them, having the right so to do, he is not bound to return them to the seller, but it is sufficient if he gives notice to the seller that he refuses to accept them.

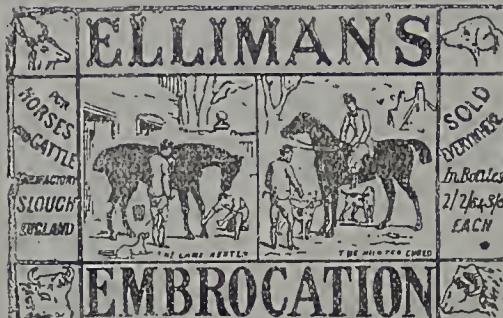
40. *Liability of buyer for neglecting or refusing delivery of goods.*—When the seller is ready and willing to deliver the goods, and requests the buyer to take delivery, and the buyer does not within a reasonable time after such request take delivery of the goods, he is liable to the seller for any loss occasioned by his neglect or refusal to take delivery, and also for a reasonable charge for the care and custody of the goods.



GOLD MEDALS 1884-1885-1886-1888.

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they must count the cost, and contrast with it the work done. It is well at the outset to keep in mind the fact that it was the research idea which was the cause of the erection of the building in Galen Place. When it was seen that that property was to swallow more than 10,000*l.*, official ideas regarding research were considerably modified; yet, making all allowance for that, we may fairly say that the laboratory is entitled to be charged with 250*l.* annually, as its share of the rent, taxes, gas, &c. This is just about a third of what may be taken to be the allowance for the whole building. We find, therefore, that in the three years the laboratory has cost the Society 1,950*l.*, or deducting the cost of fittings (less depreciation), say, 1,700*l.*

In the three years the work done, so far as is known to the public, has comprised the following:—

1888.

- "Preparation of Ethyl Nitrite."
- "Chemical Observations on Tartar Emetic."
- "Chemistry of Isobutyl Nitrite."
- "Metameric Amyl Nitrites."
- "Chemical Constituents of the Amyl Nitrite used in Medicine."

1889.

- "An Apparatus for the Estimation of Nitrites."
- "The So-called Mussænda Coffee of Réunion."
- "Chemical Constituents of *Scopola carniolica*."
- "Occurrence of Skatole in the Vegetable Kingdom" (communicated to the Royal Society).

1890.

- "Double Cyanide of Mercury and Zinc."
- "Constituents of Commercial Salicylic Acid."
- "Investigation of the Conditions under which Hydrogen Peroxide is formed in Ether" (communicated to the Chemical Society; also a second note on the same subject, rendered necessary by criticism and extended observation).

It will be seen from this that in the course of three years twelve papers have emanated from the research laboratory, and that these deal with eight subjects. It is unnecessary to refer at any length to the papers; the most important of them were those on the alcoholic nitrites, *Scopola carniolica*, the double cyanide, and salicylic acid, all of which brought along with them papers from outside workers. For that the laboratory is entitled to due recognition. The communications from the laboratory have been such as to draw out medical knights and professors, all of whom have in a more or less stereotyped fashion praised the institution, and thereby brought honour to the Society. The laboratory is entitled, also, to be credited on that account. Then it is also claimed for the laboratory that it is "an institution where the pharmacist may acquire such knowledge as will enable him to pursue the higher branches of his calling"—we quote from one of the committee's reports—it is "a true system of 'technical education' for the pharmacist. No more useful post-graduate course for the pharmacist could be devised than that carried on under, and controlled by, competent supervision."

Taking it so, we note that in the first year three young pharmacists, independent of the demonstrator, were engaged in the published work; in the second year, there was one pharmacist only, and in the present year, none, the young man who has assisted the director in the published work being still in his teens, and having no connection whatever with pharmacy. We see, therefore, that in the period of probation, the period which was to demonstrate the necessity for, and the usefulness of, such an institution, four pharmacists have "grappled with those 'practical' but com-

plicated problems which lie at the root of pharmacy"; and they have been turned out at the rate of 425*l.* each, "to pursue the higher branches of their calling." We sincerely hope so, but what are those "practical, but complicated problems"? Two of them are so complicated that it has required the superior wisdom of the Chemical and Royal Societies to "take in" the results. Of the ten which remain, not a single one is what pharmacists generally would call "practical," but most of them are in the highest degree "complicated." There is no use hiding the fact that the laboratory has not touched an immense field of unsolved problems in pharmacy which can never be satisfactorily dealt with by private individuals. However highly we may value the chemical work which the laboratory has done, we cannot admit that it has kept in touch with pharmacy, or that the published results have always passed unchallenged. If we set the cost up to the present on one side, 1,700*l.*, and the dozen papers, and four post-graduate-trained pharmacists on the other, do we strike a balance? We leave that for the Pharmaceutical Council to answer. Before they answer they should endeavour to find out how many pharmacists and non-pharmacists have worked in the laboratory since it was opened; how many subjects have been investigated regarding which no results have been published; and what are the prospects for the future, especially in regard to the nature of the work which it is proposed to undertake and the competence of the supervision which will be exercised. As now conducted, the laboratory seems to us to be nothing more than an expensive chemical plaything, incompetent of undertaking investigations in pure pharmacy and in *materia medica*. As a high school of pharmacy it is a complete failure.

QUININE AND CINCHONA IN BRITISH INDIA.

In our issue of June 9, 1888, we gave an account of the process for manufacturing sulphate of quinine then newly inaugurated by the Indian Government upon some of their cinchona estates. Further details of this process are now made public in Mr. Lawson's report on the Indian Government cinchona plantations. That report deals with the quinine factory at Naduvatam, in the Nilgiri district. The *modus operandi* followed at Naduvatam is practically the same as that published about two years ago; hence, although the account is repeated in the present report, it does not add, and could not be expected to add, much to our knowledge. Some wrinkles have evidently been gained by experience. The bark is no longer powdered so fine as it was at first, a No. 64 sieve having proved sufficient for the purpose, instead of the No. 130 one first employed. The proportions of cinchona powder, alkali, and kerosene, have also been slightly modified, the present formula being to place 200 lbs. of powdered bark in a cylindrical vat with 100 gallons of water holding 14 lbs. of caustic soda in solution, adding to this a mixture of 96 gallons paraffin and 24 gallons fusel oil, and agitating for three hours with a revolving paddle. The subsequent process of drawing off the oil into which the alkaloids have been incorporated, dissolving out the latter by means of water acidulated with sulphuric acid, filtering the acid liquor through charcoal, crystallising out the sulphate of quinine, and drying the crystals, is all substantially the same as when described eighteen months ago. The bark now used for manufacturing purposes at Naduvatam is a mixture of branch, stem, and root of *Cinchona officinalis*. It has an alkaloidal value of 3·02 per cent. quinine, 1·01 per cent. cinchonidine, 0·14 per cent. quinidine, 0·24 per cent. cinchonine, and 0·30 per cent.

amorphous. Its equivalent in quinine sulphate is 4·06 per cent. The factory has had to struggle with a good many adversities before it was able to work without interruption on a large scale. The manufactory was started at Naduvatam in June, 1889, but it took four months to train the native workmen to their task. This work accomplished, it was found that the loss of the costly fusel oil was so great as seriously to hamper the working of the process, and the manufacture had to be suspended until February, to admit of the erection of a still for recovering the fusel oil. Just as everything was ready to start, influenza broke out at Naduvatam, and all the native workmen ran away to their homes in Mysore, a fresh squad having to be engaged and drilled. Finally, the steam-engine was found inadequate for its work, and the plant had to undergo a thorough alteration. All obstacles, however, were ultimately overcome, and since the end of May of this year the factory is in full working order. The cost of manufacturing the first batch of 227 lbs. sulphate of quinine was 3,915.12 rupees, or 17.4 rupees per lb., equal to about 1s. 6d. per oz. It took 6,000 lbs. of bark to obtain that quantity of sulphate of quinine. The value of the bark was 3,626 rupees; fuel, chemicals, and the cost of plant amounted to 205 rupees; and for labour only 84 rupees, or less than one-third of a penny per oz. of quinine, is charged. It is, therefore, not likely that the Indian Government quinine will do much injury to the sale of the European article in the East, even if it should ever attempt to enter into serious competition with the latter. But as the Naduvatam factory is only estimated to turn out the comparatively insignificant total of about 65,000 oz. per annum, there is not much chance of that.

Added to Mr. Lawson's report on quinine manufacture is a statement by Mr. D. Hooper on the progress of the Government plantations during the year under review, which contains some interesting notes on the experiments on the artificial increase of the alkaloidal value of cinchonas. Since 1886 a valuable series of experiments on the effect of manuring on the different species of cinchona has been inaugurated, and the result has been to prove that the application of ammoniacal manure, such as cattle, stable and poonac, to cinchonas is always attended with a profitable outturn of a larger quantity of richer bark, especially on young and fast-growing species, as *Succirubras*, *Ledgers*, and *Hybrids*, and that the agents employed act more energetically upon younger trees than older ones and upon the fast-growing trees just mentioned that on the slow-growing *officinalis*. It remained to be proved whether the action of fertilising agents for a longer period on *officinalis* trees would be attended with remunerative results, and what effect they would have upon mossed and renewed barks.

In order to elucidate this problem careful experiments were made with ten *officinalis* trees at Dodabetta. Four of these were eleven-year-old trees and six twenty-one-year-old trees. The manures used were bone-meal, fish, lime and cattle manure. One pound of the bone-meal manure or 2 $\frac{3}{4}$ lbs. of fish manure were used to each tree, but the quantity of the other manures employed is not stated. Of the eleven-year-old natural *officinalis* trees, the one manured with bone-meal yielded 5·78 per cent. of total alkaloid and an equivalent of 4·95 per cent. of sulphate of quinine. That manured with fish afforded respectively 6·82 and 5·94 per cent., while from lime and cattle manure 5·68 and 5·19 per cent., and from bone-meal and cattle 5·97 and 5·35 per cent., respectively were obtained. The results obtained from the twenty-one year old trees, were as follows:—Renewed bark: fish manure, 8·21 per cent. total alkaloid, 8·43 per cent. sulphate of quinine; bone-meal manure, 7·02 per cent. total alkaloid,

7·02 percent. sulphate of quinine. Mossed bark: fish manure, 6·61 and 5·97 per cent.; bone-meal, 7·48 and 7·02 per cent. respectively. Natural bark: fish-manure 6·14 and 5·54 per cent.; bone-meal, 7·38 and 6·85 per cent. respectively.

All these are exceedingly good barks, when compared with the natural crown bark, containing an average of 3 per cent. of quinine when grown in the same situation without manure. The fish manure especially has raised the amount of quinine to a considerable extent in the barks to which it was applied.

In the present critical state of the cinchona industry such experiments must be of considerable value to planters.

LEGAL LORE.

THERE are several points in the legal reports which we publish this week which are worthy of special attention. The case in which a firm of chemists' agents sued a chemist for a commission which he had already paid to another agent, illustrates a difficulty which might be expected to occur much more frequently than it does. When a man wants to buy a business it is not surprising if he makes a round of calls at the offices where information as to concerns in the market can be obtained. So, too, when a man wishes to sell a business. He is very likely to give particulars of it to three or four agents, if not when he first proposes to get rid of it, at any rate on receipt of one of those seductive letters which the transfer gentlemen know so well how to write. With the keen competition prevailing in this profession, and with the delicate shades of distinction which seem to be recognised in apportioning the rewards, when a transaction does come off, it seems simply wonderful that so few disputes should come before the public. Mr. Commissioner Kerr is a sound lawyer, and he has a reputation for shrewd common sense at least equal to that which he enjoys for legal acumen; but he can hardly be said to have made the law as to these commissions any plainer or simpler by his recent decision than it was before. Hitherto there has been a general understanding that the properly-authorised agent who first mentioned the business to the man who turns out to be the customer was the one entitled to the commission. The strict observance of such a principle was calculated to deal out only a rough sort of justice; but it was a principle of some sort, and Mr. Commissioner Kerr has interposed a qualification which destroys its one merit of simplicity. He seeks to ascertain which agent it was who influenced the client's mind towards a purchase. A famous English Chief Justice in the fifteenth century once declared that "the thought of a man is not triable, for the devil himself knows not the thought of a man." But the worst of Mr. Commissioner Kerr's system is that it renders so many more cases doubtful, and liable to dispute.

Business transfer agents do an exceedingly useful work. The advantage of having the services of a man of experience in such affairs when a business has to be bought or sold is obvious, and it is a pity that some arrangement cannot be agreed upon among themselves, so that each one who did work in the matter should be sure of fair remuneration. One of Commissioner Kerr's remarks strikes us as rather unfair. He refused to admit that the plaintiff had introduced the ultimate buyer, because it appeared that in the conversation admitted on both sides the agent had recommended another business as more suitable. This, says the learned judge, was equivalent to saying, "Don't buy the business." We cannot see that it necessarily affects the question of introduction, if it is fairly pointed out that a certain other business would be more suitable for the client.

Another case of much wider interest is that reported from the Leeds assizes, in which Dr. Dacre Fox, alleged to have been "the late," but who gave conclusive evidence of his existence, has been awarded 1,000*l.* damages for a statement concerning himself, found to have been libellous, which the proprietors of "Mother Seigel's syrup" had issued broadcast in an advertising pamphlet. According to the advertisers, their compound had cured a man who had been practically given up by the doctors. This general sort of assertion is familiar enough, and though it may be a libel on the profession generally, does not, under ordinary circumstances, furnish a basis for a particular action. But the defendants in this case had gone beyond that safe line. The statement they published clearly implied that Dr. Dacre Fox had made an erroneous diagnosis. This was the libel. Dr. Fox denied having written or expressed the opinion attributed to him, and the defendants failed to substantiate their allegation. Hence the verdict. At the same time it may be remarked that the ever-watchful puritans in medical matters—the people who regard a stamped medicine as the type of the unclean thing—will not get much comfort out of this case. The testimonial published was proved to have been genuine enough, and the patient himself was evidently convinced that he owed his improved health to the syrup rather than to the doctors' stuff. Patients have often a very unscientific way of looking at these things, but their ideas have a certain amount of practical force. We are not at all sure that the thousand-pound cheque, which, unless the attempt to get a new trial should be successful, will pass from the defendants to the plaintiff in the recent widely-reported case, will prove to have been all money lost.

COMMENTARY.

PURE SALICYLIC ACID.—A medical contemporary has got a little mixed about the recent controversy regarding salicylic acid. "There is genuine ground for dissatisfaction," it says, "for it has been proved that the artificial product contains a tangible amount of a poisonous substance, known to the select few as orthocresotic acid. It is therefore a matter for congratulation that measures have been taken to ensure the absence of this impurity in future. Henceforth, thanks to the Pharmacopœia Committee of the General Medical Council, it will be incumbent on chemists to supply the purified products." That is the very thing the Pharmacopœia Committee would not do.

PRESERVATIVES IN FOOD.—At a recent meeting of the Society of Public Analysts Mr. Otto Hechner called attention to the use of preservatives in food, the subject having received public attention from a case in London in which a milk-seller was fined for selling milk to which boric acid had been added. Mr. Hechner referred to the various foods into which boric acid or salicylic acid enters, and discussed the physiological action of these bodies. In butters he has found from .09 to .41 per cent. of boric acid, and from .19 to .55 per cent. of borax. He stated that salicylic acid has not been much used in this country as a preservative except for fermented liquors; it is not very suitable for butters and milk. After referring to what has been done on the Continent in the way of prohibition, Mr. Hechner said that we have done nothing in this country in that direction—indeed, brewers are allowed, upon the sanction of the Inland Revenue Commissioners, to add preservatives, and, as long as the addition of anything does not interfere with the revenue, preservatives, such as salicylic acid and bisulphite

of lime, may be used. In concluding his paper, Mr. Hechner said to his fellow-members:—

We should work for entire prohibition of all kinds of preservatives. It is time that we went back to natural food. I object to be physicked indiscriminately by persons not qualified to administer medicine whilst I am in health; I object still more when I am ill. I object still more strongly to have my children physicked in their milk or their bread and butter. It is no consolation to me to know that the physic is not immediately fatal, or not even violently injurious.

The practice is utterly unjustifiable, except from the point of view of a dealer, who wants to make an extra profit, who wants to palm off a stale or ill-prepared article upon the public.

We owe our very existence, as public analysts, to the desire of the public to have a guarantee of the absolute purity of their food-supply, and we would only be doing our duty if we did suppress the large and growing use of these objectionable chemicals called food preservatives.

It is difficult sometimes to discover from the utterances of public analysts where their interests end and the protection of the public begins.

PROPAGATION OF DRUGS IN INDIA.—Mr. M. A. Lawson, the director of the Indian cinchona plantations, in his report for 1889-90 on the Government gardens and parks under his supervision, gives some interesting particulars on the propagation of economic plants in India. Among the drugs cultivated at Ootacamund, jalap and rhubarb are flourishing best. In February of this year 250 lbs. of dried jalap tubers were obtained from plants laid down three seasons ago. This was the first crop harvested since the recommencement of jalap cultivation by order of the Indian Government in 1886. Next February another crop is expected, and that will probably yield 1,000 lbs. of dried jalap. "Medicinal rhubarb" plants, of which the stock has been considerably increased, flourish luxuriantly in the Government gardens. The report on ipecacuanha cultivation is not so satisfactory, and the growers to whom young plants were distributed from the Government gardens have not done well with them. But Mr. Lawson observes that this drug is one of very slow growth, and that it would be wrong to conclude that the attempt at cultivation is a failure because plants eighteen months old were only about 6 to 7 inches high. Pepper plants, we read, are easily propagated, and the supply could be readily increased if any demand for the plant should arise. Considering the collapse of the pepper markets in Europe, however, it would seem hardly advisable for the Indian planters to increase the supply of that spice at the present moment. Of two plants of Jamaica sarsaparilla received from Kew only one survived the journey, and is doing well.

THE PHARMACOPŒIA ADDITIONS AND THE COMMANDMENTS.—If the ethics of medicine and the Decalogue come into conflict, which of them ought to give way? We have our opinion, which is, perhaps, not quite coincident with that of the *British Medical Journal*. In commenting on the "Additions to the Pharmacopœia," our contemporary says:—

The names of certain of the new remedies, such as antipyrin and lanolin, are registered trade-marks in the United Kingdom; and, as the law at present stands, substances prescribed under such registered names must be dispensed as supplied by the firms who hold the patent. Certain of them, however, can be manufactured by other than the patented methods, and this difficulty has been overcome by rechristening the substances in question. Thus, antipyrin is designated as phenazone, and lanolin as adeps lanae hydrosus. The new names will be a little strange at first, but there are undoubtedly advantages in using them in preference to names which, although more familiar, are yet the special property of particular firms of manufacturers.

The commandments say, "Thou shalt not steal," and "Thou shalt not covet anything that is thy neighbour's." There are, as the organ of the medical profession asserts, undoubted advantages in getting for yourself the profit which another man has fairly earned; but much the same might be said about other people's spoons and purses.

THE MANIA FOR CURES is strong with the public at present, and, as a consequence, "discoveries" which in ordinary circumstances would never be heard of are eagerly seized, and some of them transmitted from continent to continent with as great dispatch as if an empire had fallen. Edison, the Wizard of Menlo Park, has "discovered," the newspapers tell us, that "lithine and electricity" cure gout. Try again, Mr. Edison, or Mr. Newspaper Paragrapher, for we expect Mr. Edison has something else than gout to think about. Brown Sequard's elixir of life has been found by a Russian doctor to have the same effect as Koch's lymph. Here is hope for spermine. The trouble is that Brown Sequard says his elixir will do nothing of the sort. There has been a boom of a discovery by Dr. William Russell, of Edinburgh, in regard to cancer. He has found, and has reported to the Pathological Society of London, as well as to an Edinburgh society, that cancerous tissue contains a globular organism, which is made visible by a process of double staining, first with fuchsine and then with iodine green. After studying this organism Dr. Russell says: "There is absolutely no doubt that the organism is a fungus which belongs to the sprouting fungi (*Sprosspilze* of Nägeli), a class which includes the yeast fungus; and if the presence of this parasitic fungus in cancer is confirmed by other observers, we have found in it an organism which from its very character implies the production of a fermentation product; while the nutrition, the reproduction, and the death of the fungus cannot be conceived as occurring in the tissues without producing changes not disproportionate in magnitude to the anatomical changes present in cancer." Dr. Russell refuses to be interviewed about the matter, and no cure is attached to his communication. Then we have also from Koch's Hygienic Institute a cure for tetanus and diphtheria, Behring and Kitasato being the discoverers. According to Dr. E. H. Hankin (*Nature*, December 11), specialists have been working up to this for some years, researches having shown, firstly, that when an animal has been made immune against a pathogenic microbe, its blood and other body fluids contain a substance capable of destroying the microbe in question; secondly, it follows that such protective substances can remain in the body undestroyed for a considerable time; and, thirdly, that they can be present in such quantities as to be able to kill the microbes involved (even without the help of living cells) and yet produce no appreciable ill effect on the general health of the animal. We are not yet informed what the method from Koch's institute is, but it has been found that the immunity of rats and guinea-pigs is due to a something in the blood, and the same thing applies to the immunity of the rabbit from diphtheria. Upon these facts they appear to have founded a brilliantly successful method of treatment; but why should we speak about it now? They do not say what it is. It is all to be told in the *Zeitschrift für Hygiene*. Sir Joseph Lister has been praising Koch up to the skies. Here is a gem from a lecture by him at King's College. "One-thousandth of a gramme of the fluid is the usual dose for the first injection in a case of phthisis. Now, Dr. Koch informed me that the undiluted fluid contains probably only about a thousandth part of the really active ingredient. If, therefore, one-thousandth of a gramme of the fluid is employed, only a millionth of a gramme of the active substance is used;

yet this almost inconceivably minute quantity, diffused throughout the circulation of the human body, gives rise to these remarkable changes." The latest reports of this "cure" state that a patient has actually been killed by it.

THE MELTING-POINT OF PARALDEHYDE.

BY P. W. SQUIRE.

IN THE CHEMIST AND DRUGGIST of December 13, 1890, I in a criticism on the new Addendum to the Pharmacopœia, exception is taken to the wording of one of the tests in terms which show that some misunderstanding exists on the subject.

Paraldehyde, like oil of anise and many other liquids, may be cooled without agitation to a temperature far below its real freezing-point, and then may suddenly set into a solid mass, the temperature at the same time rising to the melting point of the crystals, providing that the reduction of temperature has not been carried so far that the heat evolved during solidification is insufficient to raise the mass to its initial melting-point. If, however, the liquid be stirred while it is cooling, or a paraldehyde crystal be dropped into the liquid while just at its crystallising-point, then the freezing-point of the liquid and the melting-point of the crystals will almost coincide.

The melting-point of "absolute" paraldehyde does not seem to have been determined with any degree of certainty, as the generally accepted figure, 51° F. (10.5° C.), is too low. The melting-point of the crystals obtainable from various samples appears to be modified by the presence of impurities in the liquid from which they are crystallised. Two years ago the best commercial sample examined in our laboratory began to crystallise at 50° F., but was not wholly solid above 48°, this latter being also the temperature to which the thermometer suddenly rose after the liquid had been cooled below its freezing-point and then stirred. Several other samples showed no sign of solidification above 44° F., and obviously contained both aldehyde and acid. We find now that paraldehyde from the same source as the sample first mentioned gives a still higher melting-point than before. The bulk solidifies at 52° F., and, by separating the crystals which first form, it is comparatively easy to obtain a fraction with a melting-point of 53° F. This is the highest figure yet noticed; and even now we do not know that this is "paraldehyde absolute." By systematic fractional crystallisation of a large quantity of material, a still higher melting-point might be obtained.

As the solid polymer "metaldehyde" is almost insoluble in paraldehyde (except while heated), it is probable that the higher the melting-point the purer the compound; but any sample which passes the other tests, and conforms to the B.P. standard of "beginning to congeal at 10° C." ("with agitation" being understood), should be sufficiently pure for all practical purposes.

BENZOIC ACID.—The authorities of the Central Italian Government Laboratory propose to distinguish between benzoic acid from gum benzoin and that obtained from urine, phthalic acid, &c., in the following manner:—(1) A small portion of the sample is sublimed, when the former yields no residue, while the latter gives a small residue of lime; (2) when heated with potash, the acid from urine gives off ammonia; and (3) in the acid obtained from trichloro-toluene, traces of chlorine can be recognised by Jacobson's copper oxide test.



AND

Literary Notes.

Bench Book of Test-tube Work in Chemistry. By H. T. Tilley, M.A. 2nd edit. London: Simpkin, Marshall, Hamilton, Kent & Co. 1s.

As far as it goes (fourteen pages) this book deals with the tests for simple salts; but there is a table at the end for the detection of metals in mixtures. Free acids are not provided for, and citrates are not mentioned, so that it is not a book for pharmaceutical students. It is purposely meant for those who work under a teacher.

Hints to Sanitary Science, for the Use of Candidates for Public Health Qualifications. By Francis J. Allan, M.D. London: Baillière, Tindall & Cox. Pp. 236. 4s. 6d.

MOST of the medical examining bodies have of late provided examinations and granted diplomas in public health subjects. These comprise, generally, physics and chemistry, more or less practical, the microscope, the principles of pneumatics, hydrostatics, and hydraulics, an acquaintance with the methods of water-supply, of the construction of dwellings, of the disposal of sewage and refuse, and of sanitary engineering. Candidates are also required to be acquainted with the laws relating to public health, with the science of epidemic and infectious diseases, and with sanitary subjects generally. These topics, with the exception of the legal ones, are dealt with, necessarily in a condensed manner, in Dr. Allen's little book. For the price charged the publishers might have added a few illustrations to the sections on analysis, sewage, ventilation, habitations, &c.

The Dignity of Woman's Health, and the Nemesis of its Neglect. By Robert R. Rentoul, M.D. London: J. & A. Churchill. Pp. 144. 3s. 6d.

THE author of this treatise is the gentleman who has so persistently advocated a reform in our systems of charitable medical relief. In this work he gives very practical and common-sense advice, especially in relation to the two critical periods of a woman's life. It is a book which may be read with much advantage by the parents of daughters. In a latter chapter the author discusses the fitness of women for continuous work and study. He properly says that this is not a question of the superiority or inferiority of the female. Few believe in any essential difference of that kind. But he urges that the question should be studied from the physiological and creative points of view. This is admitted. But he does not much enlighten us as to the way a woman who has to earn a living is to get one in strict harmony with his physiological advice. To advocate that women should limit themselves to domestic duties is, under actual conditions, a little less practical than Dr. Rentoul's other quite wise but hopeless recommendation that they should avoid excitement in the period of preparation for marriage.

Micro-organisms, including an account of recent experiments on the Destruction of Microbes in certain Infectious Diseases—Phthisis, &c. By A. B. Griffiths, Ph.D., F.R.S.E., &c. London: Baillière, Tindall & Cox. Pp. 360. 6s.

THE surprising thing about this work is that, notwithstanding the announcement quoted from the title-page, and though the book is dated 1891, and has been actually published within the past month, the account of "recent experiments on the destruction of microbes in phthisis" does not include any reference to those of Dr. Koch in that

direction. Evidently the book was written, and perhaps printed, before the startling news of the German bacteriologist's supposed discovery had been made public. Dr. Griffiths is not a medical man, but as a scientist of experience in bacteriological research he appears to be well qualified to tell the history and describe the methods of bacteriological research—a department of science which dates, medically, from 1863 only, when Davaine reported the first discovery of a pathogenic organism. The subject of microbes now forms an almost essential part of any educated person's acquirements, and Dr. Griffiths's book provides a useful manual for teaching what has been discovered in regard to bacteria and ptomaines. The author would be all the better for a little scepticism in regard to the claims of bacteriologists who profess to have found success in the war against these infinitesimal foes. He appears to fully accept Pasteur's hydrophobia statistics and Koch's comma bacillus theory of the origin of cholera. Against the bacillus of phthisis several methods of treatment are described. Dr. Bergeon, of Paris, has recommended anal injections of a mixture of pure sulphurated hydrogen and carbon dioxide gases; Dr. Kolischer, of Vienna, administers hypodermic injections of phosphate of calcium; and other experimenters have given eucalyptus oil and superheated dry air. The author's own advice is to inject subcutaneously twice a day 5 to 20 minims of a warm saturated solution of salicylic acid, and he gives particulars of a few cases which have satisfied him that this is the appropriate remedy.

Pasteur and Rabies. By Thomas M. Dolan, M.D. London: G. Bell & Sons. Pp. 83. 1s. 6d.

DR. DOLAN is not, so far as we know, pledged to a side in the vivisection controversy, and he had made a special study of hydrophobia before M. Pasteur commenced his investigations. It would seem, therefore, that he could consider with an unprejudiced mind and a competent judgment the work of the Pasteur Institute. His analysis of the statistics furnished by M. Pasteur and his associates leads him to a very different conclusion to that which was published at the Mansion House meeting in July, 1889, when it was roundly declared that out of 7,000 bitten people who had been treated at the institute only 100 had died, instead of the 1,000 which would have died if they had not had the benefits of M. Pasteur's science, and that consequently "the other 900 lives were as absolutely saved as if they had been snatched from drowning." At that meeting Sir James Paget committed himself to the endorsement of M. Pasteur's system with the noteworthy expression that "those who knew him (Pasteur) would rely on his word without any question"—a condition of mind which does credit to the eminent English surgeon's amiability, but destroys on this subject his qualification as a critic. Dr. Dolan points out that while the most reliable statistics show an average of 25 deaths from hydrophobia in France, over a long series of years, the known deaths of French people occurring from hydrophobia and paralytic hydrophobia among patients who have been treated has averaged 22 per year since the Pasteur Institute has been organised. Where the opportunity for the 900 saved lives comes in is not obvious. The conception of the system is hideous, and is based on no sound principle of science. Dr. Dolan shows that the methods of carrying it out have been varied from time to time, and that the explanations given of its occasional failures cannot be reconciled with each other. Madame Caressa, from Spain, was treated a year after being bitten, and her case is reckoned as a cure; Lord Doneraile was treated eleven days after the bite, and M. Pasteur intimated that the delay and the refusal to submit to the stronger treatment were the reasons for his death. These are specimens of the inconsistencies pointed out by Dr. Dolan, whose little book is at least worthy of respectful answer from one of the faithful.

The Annual Report of the Philadelphia Alumini Association for 1889-1890 contains a number of interesting papers in addition to full reports of the Association's proceedings.

Scientific Notes:

*On Chemistry, Pharmacy, Botany, Materia Medica, &c.
Original, Selected, and Translated.*

GUAIACOL TEST.

GUAIACOL should dissolve in 60 times its weight of water and should give a beautiful purple colour with a few drops of concentrated sulphuric acid. It would appear from the report of Marfori that there is a good deal of impure stuff in Germany, whence we get much of our supplies.

DETERMINATION OF THE AMOUNT OF ANHYDROUS GLYCERINE IN COMMERCIAL GLYCERINE.

MESSRS. N. E. AND C. DEISS adopt a novel plan for this determination. In a note to the *Chemiker Zeitung* they direct 10 grammes of the glycerine to be mixed with 6 grammes of liquefied carbolic acid, and then run into the mixture from a burette an aqueous solution of carbolic acid (50 grammes in 1,000 grammes) until at 11° C. turbidity occurs. Anhydrous glycerine takes up 28·15 c.c. of the carbolic solution, and every 0·39 c.c. less of the solution required is equivalent to 1 per cent. deficiency in the glycerine.

THE DETECTION OF BENZOIC ACID IN BEER.

MAKE 100 c.c. of the liquor alkaline with soda solution and evaporate to a pasty consistency; acidify with hydrochloric acid, mix with some clean quartz sand, and extract with 20 c.c. of ether. Evaporate the ether, mix with 2 c.c. of sulphuric acid and heat to 210° C.; at this temperature add two or three decigrammes of sulphuric acid. A clear liquid separates on standing, and this is decanted off into a test-tube containing weak ammonia. Finally, one drop of fresh ammonium hydrosulphide is added, and then, if there were any benzoic acid in the sample of beer, a reddish-brown colouration at once becomes evident. This test is one of exceeding delicacy. It is stated that by its means the presence of so small a quantity as three-tenths of a milligramme of benzoic acid can readily be recognised.

LINSEED AND MUSTARD MEALS.

IT is well known that linseed-meal is apt to get mouldy and to be attacked by mites. The insect which eats it up is the cheese-mite (*Tyroglyphus siro*), which can easily be distinguished by a lens. Another mite (*T. longior*) is also found in old linseed-meal, but so far we are not aware of its discovery in mustard-meal until M. David, a French pharmacist, recently noticed it. He points out that the idea that this mite gives rise to a kind of itch is erroneous. Méguin has shown that the mites live in any medium (such as those meals) until the supply of food is exhausted; then the males and the larvae die off, and the females undergo a transformation, becoming neuter and growing an abdomen which enables them to attach themselves to any animal or other medium which will transport them to where they can get more food. As soon as the desired haven is reached the insect immediately begins to resume its former shape and sex, and the life-history continues afresh.

CHARACTERISTICS OF TRAGACANTH.

MANY of the new tests of the German Pharmacopœia have been severely criticised, notably the ammonio-silver test for glycerine. The discussion regarding that is still going on, and there is no saying where it will end. Amongst the minor critiques, one on tragacanth is not without interest. The Pharmacopœia states that the mucilage formed by treating the powdered gum with fifty times its weight of water gives a yellow colour on the addition of soda-solution. L. Reuter points out in the *Apoth. Zeitung* that this only happens when the mixture is heated on a water-bath; at the ordinary temperature the mixture remains colourless. In a second note, Mr. Reuter speaks of the bodies extracted from tragacanth by means of rectified spirit (91 per cent.). The residue obtained from this yielded to chloroform a yellow-coloured, fatty substance; to absolute alcohol a bitter substance, easily and completely soluble in water, and possessing an intensely bitter taste, the part of the original

extract remaining was found to reduce Fehling's solution; and it is presumed that it is the sugar to which Flückiger refers as being with the bitter substance a constituent of tragacanth. The spirituous extract was found to behave towards soda-solution exactly the same way as has been mentioned.

POMEGRANATE BARK.

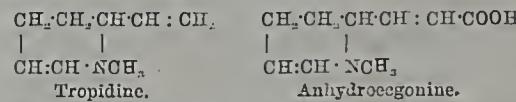
IN a recent issue of *Med. Tijdschr. v. Pharm.* W. Stoeder refers to the varieties of *Punica granatum*, L., cultivated in Java. There are three, it appears, the first having black flowers. The second variety has red flowers. The third variety has a white flower. Stoeder has examined the root-bark of these for alkaloid according to the Dutch Pharmacopœia method, and he obtained 3·75 per cent. of the alkaloidal hydrochlorate from the bark of the white-flowered variety, 2·43 per cent. from the red-flowered, and 1·71 per cent. from the black-flowered. These results are obviously good, and it is believed that the cultivation of the pomegranate tree could be made as profitable in Java as cinchona has been.

RUSSIAN PEPPERMINT OIL.

OIL OF PEPPERMINT is distilled from the fresh plant grown by M. Medwedjeff, a planter in the Kasan government of Russia, and a sample of it has been chemically examined by Hugo Andres (*Phar. Zeit. für Russ.*). The oil is of a greenish-yellow colour, and was found to have a specific gravity of 0·915 at 15° C., and its sp. rot. was $a_D - 17\cdot 13$. Fractionated, the oil yielded, at 173° to 175° C. a distillate, which was found to be a terpene, $C_{10}H_{16}$, sp. gr. 0·8571 at 20° C.; sp. rot. $a_D - 41\cdot 19$, and the preparation and examination of its tetrabromide and dihydrochloride showed it to be identical with the limonene of Wallach. The fraction distilling at 160° to 165° C. was found to be a mixture of this terpene and menthene, $C_{10}H_{14}$. The fractions distilling above 203° were resolved into menthol and menthone, the latter distilling at 211° and menthone at 206° to 208°. Menthone appears to be the body mentioned by Moriga in 1881 as having the composition $C_{10}H_{16}O$, and the author proved its identity by converting it into menthol, and isolating the pure body therefrom. [It is interesting to compare with this note one on a sample of Russian oil obtained from Woronesch, in THE CHEMIST AND DRUGGIST, April 20, 1889, page 554. It had a sp. gr. of 0·908 at 20° C. and boiled at 195° to 222° C.—ED. C. & D.]

ATROPINE AND COCAINE CLOSELY RELATED.

IT has been shown by Buchka that anhydroecgonine and tropidoc (the body obtained by the elimination of water from tropine, the saponification product of atropine and hyoscyamine) are very closely related, as may be judged from their probable formulae:—



Dr. A. Einhorn, taking advantage of the suggestion here given, has experimented with anhydroecgonine, subjecting it to the influence of hydrochloric acid at 280° C., with the result that he obtained a mixture of pyridine bases, one of which had a strong resemblance to tropidine, and which after careful purification yielded pure auro- and platino-chlorides, the analyses of which agreed with the formula $C_8H_{12}N$ (that of tropidine.) The crystallographic examination by Arzruni and Lehmann of the three salts, and the corresponding salts of tropidine, has shown their complete identity. The picrate from both sources forms long crystals with a distinct longitudinal cleavage; the aurochloride exists in two enantiotropic modifications which are converted into one another at a temperature below the boiling point of water. The platinochloride also exists in two modifications, one of which is rhombic, and the other monoclinic, the former having an orange and the latter a cinnamon-red colour. These facts show, therefore, the genetic relationships which exist between anhydroecgonine and tropidine, and that the only step now wanting for the conversion of cocaine into atropine is the formation of tropine from tropidine by the addition of the elements of water.—*Berichte und Jour. Chem. Soc.*



The following applications for Patents have been registered at the Patent office.

Aërated-liquor Fountains.—16,216.—October 11, 1890.—W. H. Davis.

Aërated-water Apparatus.—18,051.—November 10, 1890.—W. Bruce. An improved patent stopper filling machine for aërated waters.

Artificial Musk.—15,687.—October 3, 1890.—F. Valentine.

Bottle-stoppers.—17,396.—October 31, 1890.—J. L. Sutcliffe. For mineral-water or aërated-water bottles.

Capsules.—15,273.—September 26, 1890.—C. Cornu. An improvement in capsules or envelopes for medicinal purposes.

Chest-protectors.—16,480.—October 16, 1890. S. J. S. Bucknall and J. G. Lancaster. Throat or chest protectors.—16,974.—October 24, 1890.—E. C. Groom. Improvements in.

Chlorine and Magnesia.—18,240.—November 12, 1890.—F. M. Lyte. Improvements in production of chlorine, and the manufacture of soft burnt magnesia.

Disinfectants.—15,544.—October 1, 1890.—H. Peile.—15,771.—October 6, 1890.—C. Symes. An improved form of apparatus for discharging.—17,943.—November 7, 1890.—J. A. Phillips.

Distilling Apparatus.—17,718.—November 4, 1890.—H. H. Lake.

Druggists' Label Case.—18,912.—November 21, 1890.—O. F. Given. Druggists' label case, or attachment for bottles and jars.

Feeding-bottles.—17,586.—November 3, 1890.—T. H. Downing. A handled or looped child's feeding-bottle.—18,452.—November 15, 1890.—E. O. Day. An improved stopper for a hand-feeding bottle.

Filters.—15,794.—October 6, 1890.—H. H. Lake. Improvements in.—16,094.—October 10, 1890.—J. Haslam.—16,541.—October 17, 1890.—F. J. Westcombe.—16,566.—October 18, 1890.—P. Parker.

Filter-press.—16,251.—October 13, 1890.—H. H. Badams. Improvements in.

Inhaler.—16,428.—October 16, 1890.—J. Preston. Improved "one-cell" inhaler.—17,351.—October 30, 1890.—J. N. Harris. Chloride of ammonium.

Injectors.—16,780.—October 21, 1890.—S. Dixon.—17,041.—October 25, 1890.—W. McShane.

Kola Preparations.—15,854.—October 7, 1890.—F. T. Simson & J. Cox. Kola or caffeine or theine farinaceous and gluten food.

Liniment.—18,427.—November 15, 1890.—J. P. Bayly.

Malt Food.—15,981.—October 8, 1890.—W. Geddes. Improved malted food-preparations.

Malt Liquors.—16,942.—October 22, 1890.—F. T. Simson and J. Cox. Kola, or caffeine, or theine malt liquors, &c.

Meat Extract.—17,774.—November 5, 1890.—J. H. Niemann. A raw extract-of-meat preparation.

Perfumes.—14,823.—September 19, 1890.—C. White. The perfume lantern.

Pill-machine.—15,443.—September 30, 1890.—H. L. Rappolt and A. S. Steffens. An improved machine for making pills.

Pills.—16,226.—October 13, 1890.—S. Britton. Britton's pills.

Plaster.—18,518.—November 17, 1890.—J. Wilson. An improved plaster called "Terra-Tinta."

Powder-puffs.—18,014.—November 8, 1890.—J. Clark.

Shaving-brushes.—14,595.—September 16, 1890.—H. T. Plum. Improvements in.

Syphons.—15,400.—September 29, 1890.—W. H. Davis. For containing aerated liquids.

Soap-powder.—16,579.—October 18, 1890.—W. Wright. An improved.

Syringes.—15,480.—September 30, 1890.—M. G. Collins and A. H. Collins.

Toothache, &c., Remedy.—17,733.—November 4, 1890.—J. W. Murray. Remedy for toothache and neuralgia.

Tooth-brush.—18,162.—November 11, 1890.—N. Balogh de Galantha.

Trusses.—18,251.—November 12, 1890.—A. Bush. An improved hernia truss.

Specifications recently published.

1889.

11,962. Naef. Peroxide of lead, &c. 6d.

14,072. Macdonald. Filters. 8d.

14,164. Schneider. Feeding-bottles. 6d.

16,440. Barber. Bronchitis-bottle. 6d.

16,499. Gerville. Filtering apparatus. 8d.

17,218. Lyte & Tatters. Hydrochloric acid. 6d.

17,371. Groom. Flcsh-gloves. 6d.

17,395. Garroway. Caustic soda. 4d.

17,558. Thomas. Soothing teat. 6d.

18,202. Eke. Aerating and bottling liquids. 6d.

18,325. Tipping. Aerating liquids. 6d.

18,334. Arundel. Accouchement pads, &c. 6d.

18,356. Bowen. Ammoniacal salts. 4d.

18,460. Hargreaves. Disinfectants and antiseptics. 4d.

18,512. Price. Disinfectants, &c. 6d.

18,933. Stockwell. Feeding-bottles. 6d.

19,262. Murray & Kinsley. Vaporising medicines, disinfectants, &c. 6d.

19,417. Pindar. Rounding, &c., pills. 8d.

1890.

2,751. Clarke. Inhaler, &c. 8d.

3,652. Stott. Spray-producing apparatus. 6d.

4,607. Baker & Crane. Filtering oil. 8d.

5,446. Crocker. Filtering-machines. 8d.

5,488. Donald. Obtaining chlorine. 8d.

6,338. Paterson. Malted sweet foods, &c. 6d.

7,229. Koellner. Filter for oil. &c. 6d.

7,269. Philpots. Beverage. 4d.

8,544. Johnson and Hutchinson. Filter-presses. 8d.

10,876. Krohne & Sesemann. Inhalers. 6d.

11,657. Gibbs. Electric dental pluggers. 8d.

11,686. Lillie. Evaporating apparatus. 8d.

11,699. Nahnse. Obtaining chlorine, &c., by electricity. 4d.

11,723. Nicholls. Infants', &c., food. 4d.

11,870. Redfern. Sprayer. 6d.

12,260. Ellis. Distillation. 11d.

12,307. Boult. Inhalers. 6d.

12,323. Lake. Disinfecting, &c., compound. 4d.

12,391. Williams & Symons. Syphon bottles. 6d.

12,641. Vautin. Generation of chlorine gas. 4d.

13,029. James. Filters. 6d.

13,189. Shirley. Menthol plasters. 4d.

13,488. Johnson. Antiseptic. 4d.

13,627. Greve. Syphons. 6d.

13,985. Clarke. Soap powders. 4d.

15,480. Collins, M. G. & A. H. Syringes. 6d.

Medical Gleanings.

PILOCARPINE FOR DARKENING THE HAIR.

DR. PRENTISS told the International Medical Congress at Berlin of the case of a lady, aged 25, who had thin blonde hair, and who suffered from uræmic symptoms depending on an affection of the kidneys. Frequent injections of pilocarpine were given. In one month the hair had become changed to a chestnut colour, and after two months it was found to be a deep black, the hair, moreover, being much fuller and thicker than before.

UNDESIRABLE EFFECTS OF SULPHONAL.

DR. W. H. GILBERT, of Baden-Baden, communicates to the *Lancet* a note regarding three ladies who have become so addicted to the use of sulphonal as to make it a mania with them. They took 2-gramme doses, and the result, at the end of three months, was that each had a feeling of intense dizziness, weakness of thought and memory, tottering gait as under the influence of alcohol, inability of writing straight, loss of appetite, and general weakness caused the patient to seek medical aid. The complexion had become somewhat sallow-looking, and the eyes rather dim and expressionless.

ERYSIPelas.

THE modern methods of treating erysipelas are antiseptic in character. Thus Rosenbach uses a 5-per-cent. solution of carbolic acid in alcohol; Nolte improves upon that by painting a ring round the affected part with acacia mucilage. Hallopean keeps the spots damp with 5-per-cent. solution of sodium salicylate applied on cloths. Another specialist uses ichthylol-collodion, and Koch's method of treatment consists in applying the following ointment in a thin layer over the affected parts by means of a camel-hair pencil:—

Crocin	1 drachm
Iodoform	4 "
Laonine	10 "
Mix.	

After the ointment is applied, it is covered with a thin layer of gutta-percha.

TREATMENT OF DIARRHœA.

DR. H. A. HARE has contributed to the *University Medical Magazine* a note on the treatment of diarrhœa, due to defective secretion of the various intestinal juices. For one form of this is 1 drop of solution of podophyllin (gr. j. to 3j.) in a teaspoonful of water every five hours. For an older child 2 grains of podophyllin resin may be dissolved in the alcohol. In a second form, due to fermentation and irritation of the intestines, with consequent formation of mucus, Dr. Hare recommends the following prescription:—

Hydrg. bichlor.	1 gr.
Aq. distillat.	3ij.

M.

One teaspoonful every five hours.

This is effectual, and (we may add) homœopathic treatment.

THE DOSE OF EXALGINE.

ALL reports by medical men continue to show that the dose of exalgin must be kept low. Dr. Sinclair Holden, for example, says that the proper dose is half a grain, and it should not exceed one grain. Dr. Holden thinks that if generally tried exalgin would take a permanent place among our analgesic remedies, and its proper therapeutic dose and range of usefulness would soon be determined. Half-grain doses relieve pain for a short time, perhaps half-an-hour; on its return a second dose gives a longer immunity, though a third or fourth may be required. Seldom more than four doses should be given. Exalgin is generally efficacious as an analgesic in thin, spare persons of nervous temperament and subject to neurotic ailments, while it fails with the robust, plethoric, or phlegmatic, whose functional pains more often proceed from dietetic causes. It is useless in removing pain due to mechanical or organic lesions; this often accounts for its failure in

apparently suitable cases, where the cause of the pain is obscure. It has the advantage, when given in small doses, of being perfectly safe and free from those inconveniences which accompany the administering of narcotics, and which have nothing to do with the relief of pain.

A SIMPLE APERTENT FOR CHILDREN

which deserves to be widely known. Many mothers have considerable difficulty in regulating children of 2 to 4, who are in the last stages of teething. Such children generally dislike medicine, are "cute" regarding disguises, and there is little but careful dicting which can be done to establish a healthy action of the bowels. Compound liquorice powder is perhaps the most palatable and most effectual apertent, but many children refuse to take it. There are few, however, who are not fond of Pontefract cakes; they know them as a sweetmeat, and do not hesitate to eat them in any circumstances. A single Pontefract cake eaten before breakfast suffices to keep the bowels perfectly regular, the stool following an hour or two after breakfast. When the cakes are eaten too freely diarrhœa is apt to set in.

GUAIACUM AS A PURGATIVE.

DR. WILLIAM MURRELL is one of those who think that doctors are apt to forget old-fashioned drugs in the thirst for new ones. Guaiacum resin is one of the old favourites which more use can be made of, he thinks. Two years ago he prescribed the drug for a city gentleman who suffered from rheumatism; the guaiacum lozenges cured the rheumatism, but the patient continued to take the lozenges because they kept his bowels regular. Dr. Murrell therefore tried it in his hospital practice, giving 10 grains of the powdered resin in a drachm of honey; but sometimes double the dose is required. It is nasty to take, but is exceedingly effective. In his note on the subject in the *Medical Press*, Dr. Murrell says the guaiacum not infrequently gives rise to a burning sensation in the throat, and to obviate this he prescribed the 10 grains of the resin in half an ounce of extract of malt, which answered admirably. This method of treatment is, perhaps, simply a return to the old-fashioned "Chelsea Pensioner," which consists of guaiacum, rhubarb, ginger, sulphur, and certain other ingredients, but it is interesting nevertheless. Dr. Murrell is sure that a trial of the guaiacum resin as a laxative or purgative, according to the dose employed, will be found satisfactory. It is possible that if the drug were triturated with cream of tartar, sugar of milk, or some other equally inert substance, its efficacy would be increased, and it would produce the desired effect in smaller doses. This note reminds us of

ZINC SULPHITE AS A SURGICAL ANTISEPTIC.

THE paper communicated by Drs. Francis T. Hueston and Charles R. Tieborne to the British Medical Association on "A Non-poisonous, Non-irritative, Antiseptic Dressing" has been published. The substance which they recommend is zinc sulphite, a salt which Dr. Tieborne spoke about at the British Pharmaceutical Conference twenty years ago. Dr. Hueston has now tried it surgically with the happiest results, most wounds healing by first intention, many of them with the first dressing. The zinc sulphite is made by the double decomposition of zinc sulphate and sodium sulphite. When sulphite of sodium is mixed with sulphate of zinc, the sulphite of zinc is very slowly formed, but is ultimately all deposited, owing to the insoluble nature of the newly-formed salt. This phenomenon adapts it naturally and with ease to the permanent saturation of any fabric, as gauze or lint, and without the intervention of any adhesive material such as starch. The authors first boil the gauze in water to thoroughly wash and sterilise it; then upon this gauze is poured a boiling solution of zinc sulphate and sodium sulphite in equivalent proportions; when thoroughly mixed and saturated the whole is allowed to stand twelve hours. The zinc sulphite is deposited in and around the fibres of the fabric in microscopic crystals, but soft and even unctuous to the feel. The greater part of the sodium sulphate remains in solution, and the gauze is passed twice under rollers submerged in water, with the object of removing all traces of this sodium sulphate which might remain. The gauze may be dyed, with the twofold object of watching the progress of the discharges, and with the purpose of branding it distinct from other surgical dressings.

BRITISH AND FOREIGN CONSULS' REPORTS.

BRAZIL.

Drugs for Bahia. The following is the value of pharmaceutical imports (in lbs.) into Bahia during the last five years:—

	1885	1886	1887	1888	1889
Plants and herbs ..	24,309	20,215	44,759	32,489	48,175
Perfumery, dyes, &c. ..	80,503	54,108	114,470	99,991	85,404
Chemical products ..	44,664	30,033	69,309	41,824	38,199
Surgical instruments ..	1,973	1,177	2,344	1,932	1,375

STRAITS SETTLEMENTS.

Drug Exports. The following were among the shipments from Penang in 1889:—

To	Cloves	Benzoin	Patchouly	Nutmegs
United Kingdom, pic.	1,719	1,237	153	2,453
Continent .. "	1	12	170	22
United States .. "	—	—	—	1,429

UNITED STATES OF COLOMBIA.

The Condition of Trade. Although the South American Republic of Colombia has during 1889 been free from revolutionary disturbance, the commercial condition of the country has not improved. There has been no railway extension in 1889, though several projects for the completion of unfinished, and at present useless, railways are being considered by Congress.

No Roads. Perhaps the chief impediment to the extension of trade in Colombia during the past year has been the terrible condition of the chief roads of the country. The road between Honda and Bogotá, certainly the most important in Colombia, has been allowed to fall into such a condition as to be almost impassable. The consequence is that the freight from Honda, the port on the Magdalena river, to the plain of Bogotá a distance of less than fifty miles, has risen from its normal rate of about 1*l.* per mile load of 250 lbs. to 3*l.*; and the goods, which have usually been brought over the road in from ten to twelve days, have of late often taken six weeks and even two months in arriving from Honda. During all this time they are exposed to all weathers, being thrown down on the roadside without any sort of shelter; and the consequences have been disastrous to both the importers and the European insurance companies. In consequence the storehouses in Barranquilla, Honda, and other places have been overcrowded with goods which could not be forwarded for want of means of transport, or the value of which would not bear the heavy rate of freight, and whose owners have left them there to await better times before bringing them to Bogotá. Thus the whole condition of the commerce here has been disorganised.

Imports. The following figures represent the principal imports of pharmaceutical interest into Colombia in 1889 from the three principal foreign nations with which she deals:—

From—	United Kingdom.	Germany.	United States.	Total all Countries.
Drugs .. lbs.	388,726	151,219	675,797	1,691,701
Perfumes and soap ..	55,222	53,477	220,622	614,532
Quicksilver .. "	17,131	125	743	19,525

Exports. Among the exports in 1889 were:—

To—	United Kingdom.	United States.	France.	Germany.	All parts.
Balsams .. £	681	4,021	460	1,821	6,784
Cluchoua .. "	999	2,845	765	—	4,610

Trade Report.

Notice to Retail Buyers.—It should be remembered that the quotations in this section are invariably the lowest net cash prices actually paid for large quantities in bulk. In many cases allowances have to be added before ordinary prices can be ascertained. Frequently goods must be picked and sorted to suit the demands of the retail trade, causing much labour and the accumulation of rejections, not all of which are suitable, even for manufacturing purposes.

It should also be recollect that for many articles the range of quality is very wide.

42 CANNON STREET, E.C., December 18.

WITH the close of the present week business in the drug and chemical markets will be practically suspended until the commencement of the new year, and, unless any unforeseen changes should occur, the year is likely to end quietly and without much prospect of an early revival of a brisk business. The projected Quinine Syndicate does not appear to be making much headway. At least one of the largest manufacturers seems determined not to enter into any combination, and any attempt to form a ring which would exclude him is considered out of the question. The gentleman who came over from America some time ago, and who has since been actively engaged in attempting to promote an understanding, was on 'Change to-day, but, as might be expected, he declines to give any information regarding the negotiations. Fine chemicals do not show much change, although cocaine is, perhaps, just a little easier, and there is a serious weakness apparent in the market for refined camphor. Heavy chemicals are generally firm, with the partial exception of bicarbonate of soda, which has eased off a little, and cream of tartar, which may be had at a shade below last week's quotations. In drugs there is not much to report. At today's sales of varnish gums there was a good demand for kowrie gum, and prices, except for the best grades, were well maintained. A long discussion arose as to the bulking of gums, some parties maintaining that it was to the advantage of the trade to have every package offered for sale bulked, so that buyers might know exactly what they would get; while, from another side, it was maintained that the expense of bulking these gums was driving the trade away to the Dutch markets, where the gums are not so treated. Ultimately it was arranged to bring the question before the importers. At the cinchona sales the price of bark was well maintained. Saffron is low in price just now, and may not improbably improve after the turn of the year. Cod-liver oil very firmly held, and more money asked in some quarters. Jalap is rather weaker—a parcel recently offered for sale here is said to have been re-shipped to Hamburg. Among the arrivals declared this week are over 600 packages Tinnevelly senna, 9 bales buchu, 7 cases coca leaves from Calcutta, a small consignment of asafoetida direct from Bender-Abbas, on the Persian Gulf, and about 30 packages "balsam copaiba" from Sierra Leone and other parts of the West Coast of Africa. There have also been very heavy imports of annatto seeds from the East Indies. In the auxiliary markets the principal alterations calling for note are an improvement in shellac, gambier, sulphur, and some qualities of pimento, and easier rates for cloves, nutmegs, and mace. Quicksilver is also rather lower in second hands.

CINCHONA PLANTING IN JAVA.—An extraordinary general meeting of the shareholders in the West Java Cinchona Company was held in Amsterdam last week, when the managing director, Mr M. J. Boissevain, submitted certain proposals which seem to indicate that the undertaking is hardly so prosperous as its proprietors could desire. It was proposed that of the four plantations belonging to the company—viz., Tjiseureuh, Bajabang, Pangairan and Tjidoerian—the two former shall be entirely uprooted. The proceeds of the bark thus obtained are to be used to reduce the share capital of the company. It is estimated that the capital will by this method be reduced by about 30 per cent., and it is hoped that the two remaining plantations will yield a sufficient profit to admit the payment of a fair dividend on

the reduced capital. The proposal, which was the result of an investigation of the company's plantations by an expert was unanimously agreed to.

ACIDS.—*Citric* unaltered, and obtainable probably at 1s. 4d. from second-hand holders. Makers ask from 1s. 4½d. to 1s. 4½d. per lb. *Tartaric* quiet at 1s. 2½d. to 1s. 3d., according to brand. *Oxalic* firm, but unchanged.

BLEACHING-POWDER.—Firm, but little offering. The Union price is 6l. 15s., less discount.

CAMPHOR (CRUDE).—A quiet market. A few days ago a small sale of Japan camphor at 160s. per cwt., was reported, but we doubt whether there are any buyers at that price now. About 950 packages camphor have arrived this week from Japan.

CAMPHOR (REFINED).—A decidedly weaker market. There is a strong "bear" movement among Hamburg speculators, and we hear that to-day offers were solicited at 1s. 7d. per lb. for German bolls.

CINCHONA.—The last auctions of the year were held on Tuesday, when a moderately heavy supply of bark—including, besides a large quantity of Cuprea and Pitayo of old import, a good assortment of East Indian and Ceylon cinchonas—was offered for sale. The catalogues comprised:—

	Packages	Packages
Ceylon bark	1,371	of which 1,342 were sold
East Indian bark	238	" 213 "
Java bark	222	" 222 "
South American bark	1,389	" 618 "
Total	3,220	" 2,395 "

Competition was good, and almost the whole of the Eastern bark was disposed of at steady rates, the unit being from 1½d. to 1½d. per lb., according to the quality of the bark sold. The following prices were paid for sound bark:—

CEYLON CINCHONA.—*Original*:—Red varieties: Poor and woody to good bright quilly, stem and branch chips, 1½d. to 4d.; one very fine parcel, 7½d.; druggists' quill, rather dull and broken, 3d.; twigs, 1½d.; fair to good bright shavings, 2½d. to 4d.; root, 2½d. to 4d. per lb. Yellow varieties: Common small to fair bright chips, 2½d. to 6½d.; root, 6d. per lb. Grey varieties: Ordinary small and woody to fair quilly chips, 2d. to 5d.; fine strong stem chips, 5½d. to 6d.; poor to good bright shavings, 2½d. to 5d.; rich but rather dusty root, 6d. to 7½d. per lb. Hybrid: dusty to fair chips, 3d. to 4d.; ordinary to good shavings, 2½d. to 4d.; poor root, 3d. per lb. *Renewed*:—Red varieties: A large quantity of small and weak to good bright branch and stem chips, 2½d. to 4d.; some few fine parcels, 4½d. to 8d.; good bright to fine shavings, 4½d. to 8d. per lb. Grey varieties: Fair to good strong quilly chips, 4d. to 6½d.; one or two fine parcels, 7d. to 8d.; good strong shavings, 7½d. to 8d. per lb. Good Hybrid shavings, 6d.; fair to good chips, 3d. to 5d. per lb.

EAST INDIAN CINCHONA.—*Original*:—Fair, partly quilly, red chips and shavings, 2d. to 3d.; yellow chips, fair quilly, 5d.; good ditto shavings, 7½d.; dull to fair grey chips, 5d. to 5½d. per lb. *Renewed*:—Poor, partly quilly, red chips, 3d. to 3½d.; very weak and poor yellow chips, 4d.; several parcels of good strong quilly grey chips from 6d. to 8½d. per lb.

JAVA CINCHONA.—*Original*:—Red stem chips, 3½d. to 4d.; ditto root, 3d. to 3½d. per lb. Yellow, poor dusty to good strong chips, 3½d. to 6d.; fair, but dusty, to good strong root, 5d. to 8d. per lb.

SOUTH AMERICAN BARK.—Of cultivated Bolivian *Calisaya* the large quantity of 786 bales was offered, and of this 508 bales (together 57,468 lbs.) sold at firm prices: good to fine strong broken quill, 7d. to 10½d.; rather weaker and irregular ditto, 5d. to 6½d.; damages, according to class and appearance, from 4½d. to 9½d. per lb. Eighteen packages newly imported damaged *Carthagena* bark were bought in at 6d. per lb., and 185 packages *Soft Colombian* were withdrawn or bought in at nominal rates, but 70 of 1883 import (B. horse's head) sold at 2d. per lb. A quantity of old *Hard Pitayo* bark was also bought in. It is held at about 2½d. to 3d. per lb.

The next Amsterdam auctions of cinchona bark will take place on January 22.

COPPER (SULPHATE).—Fair brands on the spot, 18l. to 18l. 5s.; delivery January-February, 18l. 10s.

CREAM OF TARTAR.—Again a shade lower. Best white French crystals, 93s.; German powder, about 95s.

ETHER.—During the last few weeks the position of the alcohol market has been completely changed, as the potato crop, regarding the result of which opinions at first widely varied, is now generally acknowledged to be unsatisfactory. Spirits have consequently risen considerably, and for future delivery higher prices are now demanded than for spot. Manufacturers have therefore been obliged to raise their prices for ether.

GAMBIER.—Early in the week the market was rather easier, but since then it has recovered somewhat, and closes firm with business at 22s. 4½d. for October-November and October-December, and 22s. 3d. for January-February.

JALAP.—The market is somewhat unsettled. We understand that for a parcel of Vera Cruz jalap offered at auction last week an offer of 1s. 8d. per lb. has since been refused, and it is said that that parcel has been sent to Hamburg.

OIL (CASTOR).—The demand has been much slacker this week, and the article is offering at rather lower prices both on the spot and for delivery. Good *Calcutta* seconds and first pressure *French* are quoted at 3½d. per lb. in Liverpool. News from Calcutta, dated November 26, states that the market both for oil and seed has declined.

POTASH SALTS.—*Bichromate*: steady, at 3½d. *Chlorate*: firm, at 5½d. on the spot, and 6d. for next year, less a discount. English yellow *Prussiate*, 9½d. to 10d. per lb.; and German refined *Saltpetre*, 18s. 3d. per cwt.

QUICKSILVER.—The market is sluggish, and while the principal importers still hold at 9l. 5s. per bottle, second-hand owners are offering at 9l.

QUININE.—There has been rather more business this week, but prices are hardly improved, although the tone of the market is called stronger. About 50,000 oz. German bulk quinine in second hands are reported sold at from 11½d. to 11½d. per oz., and it is said that the *Brunswick* agents have sold a small parcel for delivery at 12½d. per oz. The following quantities of quinine were purchased at the last Amsterdam auctions by the principal buyers:—The *Brunswick Quinine-works*, about 4,204 kilos.; the *Auerbach Quinine-works*, about 3,164 kilos.; Messrs. Matthes & Bormeester, about 2,182 kilos.; the *Amsterdam Quinine-works*, about 1,597 kilos.; Mr. Gust. Briegleb, about 1,307 kilos.; the *Frankfort Quinine-works*, about 971 kilos.; Messrs. C. L. Schepp & Zoon, about 936 kilos.

SHELLAC.—Privately the market has been quiet until about the middle of the week, when a better feeling set in. Yesterday and to-day a good deal of business has been done at somewhat higher rates: TN for December delivery, 86s.; January, 87s. to 88s.; February, 86s.; and March, 85s. per cwt. At the weekly auctions on Tuesday, 802 cases were offered, of which about 300 sold at an advance of fully 6s. per cwt. on orange lac, and with very good competition. The following prices were paid:—Fine but cakey unworked seconds, 90s.; ordinary livery to fair, 83s. to 85s.; *Garnet lac*, out of condition to fair free worked AC. 80s. to 82s. per cwt.; *Button*, fine first, 92s.; good ditto, 90s. to 91s.; dark fourths, 67s. to 73s. per cwt.

SODA SALTS.—Ash, 11½d. to 1½d. per degree. *Bicarbonate* a shade easier. The holders still ask 8l. to 8l. 10s., according to packing. *Caustic*: Dull of sale. 70° on the spot, 11l. 7s. 6d. *Crystals*: Unaltered, at 63s.; and *Bichromate* quiet, at 2½d. per lb.

SPICES.—*Arrowroot* remains quiet. At the auctions only a small quantity of medium St. Vincent sold at 2d. per lb. *Chillies* firmly held. A quantity of *Zanzibars* was bought in at from 37s. to 42s. for dull to fairly good. Of *Cinnamon-chips* 152 packages were partly sold, at 5d. to 6d. for quillings, and 6½d. for broken quill. *Cloves* are again cheaper, with sales for shipment as low as 3½d. over the whole of next year. At auction a small quantity brought 3½d. for fair *Zanzibar*. *Penang cloves* also lower: Ordinary unpicked, 6d. to 6½d., fine picked, 1s. 2½d. per lb. *Ginger*: *Jamaica* remains quiet, with small sales at 77s. to 82s. for dull to medium washed. *Mace*: Lower; fair to

good West Indian, 2s. 2d. to 2s. 6d.; ordinary to fair, partly broken, red Bombay, 2s. 1d. to 2s. 4d. *Nutmegs*: Dull and cheaper for some varieties. *Black pepper* is again lower on the spot; ordinary grey to good washed Singapore, 4 $\frac{1}{2}$ d. to 4 $\frac{3}{4}$ d.; fair Tellicherry, 4d. to 4 $\frac{1}{4}$ d.; and Aleppy, 4 $\frac{1}{2}$ d. *White pepper*: Rather firmer, at 7 $\frac{1}{2}$ d. for fair Singapore, and 5d. to 5 $\frac{1}{2}$ d. for ditto Penang. *Pimento* also rather dearer for good qualities—common grey, 2 $\frac{1}{2}$ d.; medium to good, 2 $\frac{1}{4}$ d. to 2 $\frac{1}{2}$ d. per lb.

SULPHUR.—Recovered sulphur is again somewhat dearer, and is now held at 5l. 5s. per ton. Foreign flowers of brimstone are quoted at 8l., and roll at 7l. per ton net, in 2-cwt. bags. From Messina we hear, under date of December 12, that the Sicilian speculators, whose action, to a great extent, accounts for the present position of the article, now seem anxious to realise, but find it difficult to do so at the present quotations on account of the absence of a *bona-fide* trade demand.

TEA.—The *China* market is firm for lower grades, and with very limited supplies the tone is strong. Commonest Moning and Kaisow fetches 5d. to 5 $\frac{1}{4}$ d., and the 6d. to 6 $\frac{1}{2}$ d. kinds which were showing good value a month ago are about $\frac{1}{2}$ d. up from the lowest point. Siftings are not so plentiful, and those who bought the really good sweet teas recently selling at 4d. to 4 $\frac{1}{4}$ d. have good stock. Fourth crop Newmakes are selling fairly freely and are tolerably cheap, though there are none of the really fine teas of this class we used to get. The green-tea sales for the week are heavy, but prices have been well maintained for most kinds. *Assams* are in much smaller supply for the week and sold steadily, commoner grades being wanted at about previous rates, and the Pekoes from 9 $\frac{1}{2}$ d. to 1s., which have been so cheap, are beginning to show the inevitable hardening, though they are still well worth buying. *Ceylons* are rather easier for all but fine teas, and in the absence of good medium *China* teas, the Ceylon Pekoes and Pekoe Sonchongs, now selling from 9d. to 11d., will be used freely in medium blends.

CHEMICALS IN THE NORTH OF ENGLAND.

THE market for heavy chemicals, as is usual towards the close of the year, is rather quiet, with little business doing at the moment for prompt. Prices, however, on the whole are firmly held, and there is a good inquiry for forward deliveries.

BICARBONATE OF SODA, which was recently advanced, has now dropped back to the old price, and is offered at 6l. 17s. 6d. per ton on rails, and 7l. per ton, less 3 $\frac{1}{2}$ per cent., f.o.b. Liverpool, in 1-cwt. bags, with usual allowance for larger packages.

BLEACHING-POWDER.—Very little offering by second-hand, and nothing to be had from makers under 6l. 12s. 6d. per ton on rails at works, and 6l. 15s. per ton, f.o.b. Liverpool, in softwood casks. For prompt delivery, hardwood casks are offering at 7l. per ton, but for forward prices range from 7l. to 7l. 5s. per ton, f.o.b. Liverpool. Newcastle market quiet, at 6l. 15s. per ton in softwood casks, and 7l. per ton in hardwood casks, f.o.b. Tyne. All subject to 3 $\frac{1}{2}$ per cent. discount.

CAUSTIC SODA.—In small demand at present. 74-per-cent., 12l. 5s. per ton; 70-per-cent. 11l. 5s. per ton; and 60-per-cent., 10l. per ton, f.o.b. Liverpool, prompt delivery. Tyne market steady, with good demand for 77-per-cent., which is quoted 12l. per ton for solid in drums, and 16l. per ton, ground and packed in 3-4-cwt. casks, both net cash, f.o.b. Tyne.

CHLORATE OF POTASH.—Very firm, and nothing offering under 5 $\frac{1}{2}$ d. per lb., less 5 per cent. discount for prompt, and 6d. per lb. for next year, for delivery at usual ports of shipment.

CREAM CAUSTIC continues firm at 9l. 10s. per ton on rails, and 9l. 12s. 6d. per ton f.o.b. Liverpool, both less 3 $\frac{1}{2}$ per cent. For first half or whole of next year price quoted is 5s. per ton less; for shorter periods current prices are quoted.

HYPOSULPHITE OF SODA is without any change, prices being 6l. 10s. per ton in kegs, and 6l. per ton in casks, f.o.b. Tyne. For delivery in Liverpool and Manchester, prices are 7l. 5s. and 7l. 15s. per ton respectively, less 2 $\frac{1}{2}$ per cent. discount.

SODA ASH maintains its price, and makers are very busy for prompt. Prices range from 1 $\frac{5}{16}$ d. to 1 $\frac{7}{16}$ d. per degree for *Caustic*, and 1 $\frac{3}{8}$ d. to 1 $\frac{7}{16}$ d. per degree for *Carbonated*, less 3 $\frac{1}{2}$ per cent., f.o.b. Liverpool, and 1 $\frac{3}{8}$ d. per degree less 3 $\frac{1}{2}$ per cent. for carbonated f.o.b. Tyne. There is no change in forward prices.

SODA CRYSTALS remain unaltered in price, 3l. 7s. 6d. per ton net weight on rails, and 3l. 10s. per ton f.o.b. Liverpool, less 3 $\frac{1}{2}$ per cent.; and 2l. 16s. per ton gross weight net cash f.o.b. Tyne. These prices are quoted for prompt and forward deliveries.

SULPHATE OF COPPER.—Market quiet at 18l. 10s. to 18l. 15s. per ton, less 5 per cent. for prompt, and 18l. 17s. 6d. to 19l. per ton for January to April delivery.

SULPHATE OF SODA.—Steady in price at 40s. per ton in bulk on rails Widnes and St. Helen's for prompt, and 42s. 6d. per ton for whole of next year. Tyne market very steady, with considerable sales over next year. For prompt and forward price is 42s. 6d. per ton in bulk. For export, ground and packed in casks, price is 53s. per ton, less 3 $\frac{1}{2}$ per cent., f.o.b. Tyne or Liverpool.

THE GERMAN MARKETS.

HAMBURG, December 16.

BUSINESS in our market has remained exceedingly limited since the last report, partly owing to the approaching end of the year, when no one is inclined to enter into any speculative transactions, but chiefly because of the general scarcity of money, which is severely felt here, and impedes all commercial transactions. Those articles in the drug and chemical branches in which there is any change at all rule almost without exception in favour of buyers, and it seems scarcely likely that there will be any improvement until the end of January or the commencement of February.

ANTIMONY (CRUDE JAPANESE) is somewhat firmer again, and a few sales have been made for delivery, and on the spot at from 85m. to 90m.

BALSAMS.—*Copaiba*: The importers are able to sell freely, but the demand for consumption leaves much to be desired at present. Maracaibo balsam cannot be had under 5.10m. *Peruvian* is getting firmer after every transaction, and for fine quality as much as 12m., and even more than that, has been paid. All our stock is concentrated in one hand.

CAMPHOR (REFINED).—Second-hand speculators are offering cheaply.

ERGOT OF RYE.—Firmly held at full prices. A few arrivals of Spanish ergot have come in, and these have been promptly disposed of.

JALAP.—Somewhat easier, owing to fresh imports.

OILS (ESSENTIAL).—For *Star-anise* a little more money is asked, and it is questionable if anything less than 14 $\frac{3}{4}$ m. would buy. Stocks are insignificant. *Cassia* unchanged. *Peppermint*: A few sales of H.G.H. brand have taken place at low prices. At present the article may be had at 14m., or even a shade less. *Menthol*: Quiet, but firmly held.

PEREIRA BRAVA.—Large consignments have just been received here, and the article is obtainable at cheap rates.

WAX (JAPAN) is again a little firmer, but can still be bought at 84m. to 85m.

SALE OF MORPHINE.—Owing to the alarming increase in the sale of morphine, the members of the Brant (Ontario) Association have mutually agreed not to sell the drug unless under doctors' orders.



Memoranda for Correspondents.

Always send your proper name and address: we do not publish them unless you wish: if you do not, please use a distinctive nom-de-plume.

Write on one side of the paper only; and devote a separate piece of paper to each query if you ask more than one, or if you are writing about other matters at the same time.

If you send us newspapers, please mark what you wish us to read.

Ask us anything of pharmaceutical interest: we shall do our best to reply.

Before writing for formulæ consult the last volume, if you have it.

Letters, queries, &c., will be attended to in the order received.

The Pharmaceutical Council and the British Pharmacopœia.

SIR,—Referring to your leader of December 6 on the additions to the British Pharmacopœia of 1885, I find the following paragraph:—

"In one respect its publication marks a red-letter day in the history of British pharmacy, as now for the first time has the Pharmaceutical Society co-operated with the Medical Council, and had a share in the production of the book which governs and directs the operations of pharmacists."

Although this appears to be the current opinion, it is quite opposed to recorded facts, which may have escaped the notice of the younger generation of pharmacists. I therefore think it right to call your attention to the following extracts from the *Pharmaceutical Journal*, O.S. xviii. (1858), pages 359, 360, 403:—

"At a special meeting of the Council, December 15, 1858—present, Messrs. Bell, Bottle, Brew, Buckle, Davenport, Deane, Hanbury, Morson, Peacock, Sandford, Squire, and Waugh—the following letter was read:—

84 Harley Street, Cavendish Square,
December 10, 1858.

SIR,—The British Pharmacopœia Committee is desirous that the Council of the Pharmaceutical Society should appoint a member to co-operate with the London sub-committee in the preparation of the British (National) Pharmacopœia, and the committee is desirous that such appointment should be made with as little delay as possible.

I am, Sir, your obedient servant,
A. B. GARROD, Sec.

To the President of the Pharmaceutical Society.

"After some discussion, it was moved, seconded, and resolved that Mr. Squire be appointed a member to co-operate with the London sub-committee in the preparation of the British Pharmacopœia.

Harley Street, Cavendish Square,
December 18, 1858.

MY DEAR SIR,—The Pharmacopœia Committee requests the Pharmaceutical Society to continue their committee and to communicate through their delegate, Mr. Squire, any information on subjects relating to the British Pharmacopœia. One point upon which they are now desirous of obtaining information is the extent to which the drugs and preparations are employed, as this concerns the list of materia medica, which will form the first portion of the work.

Believe me, dear Sir, yours very truly.

A. B. GARROD,
Secretary to the Pharmacopœia Committee
of the Medical Council.

To Jacob Bell, Esq."

"At a meeting of Council of the North British Branch, Edinburgh, held December 16, 1858, a letter was read from Professor Christison requesting that the Edinburgh branch of the Pharmaceutical Society would have the goodness to appoint two of its members to be associated with the existing Pharmacopœia Sub-committee, and lend their valuable services in assisting to prepare the new Pharmacopœia. After mature deliberation it was proposed, and carried

unanimously, that Messrs. J. F. Macfarlan and James Robertson be appointed representatives of the Pharmaceutical Society at the board of the said committee."

The following paragraphs are taken from the communication from the President, Mr. Jacob Bell, read at the evening meeting of the Pharmaceutical Society, January 5, 1859 (*Pharmaceutical Journal*, xviii. page 403):—

"The exciting cause of this allusion to the subject is the recent official application to the Society on the part of the Medical Council for assistance in the preparation of the British Pharmacopœia, which will afford abundant materials for discussion at these meetings on subjects with which the members generally are familiar and likely to be interested. It has been for years a ground of complaint that no such opportunity was afforded for considering and discussing before publication the merits of a work professedly the text-book of our laboratories.

"In case any members should inquire in what manner they could assist in this very desirable movement, it may be proper to state that the Council of the Pharmaceutical Society is constituted the Pharmacopœia Committee, of whom several members (chiefly those residing in London) are a sub-committee, with power to add to their number. The sub-committee meets frequently to consider *scrutinizing* the various preparations, processes, and other contents of the Pharmacopœia, some of which will be brought under the notice of the members at the pharmaceutical meetings.

"The committee will be glad to receive papers or suggestions from any members of the Society whose experience may enable them to point out defects in any preparations of the present Pharmacopœias or to propose improvements."

It will be seen from the foregoing that this is not the first time that the Pharmaceutical Society have co-operated with the Pharmacopœia Committee of the General Medical Council, and also that the relations between the General Medical Council and the Pharmaceutical Society, as regards the Pharmacopœia, are not more intimate in 1890 than they were in 1858.

I am, yours faithfully,
Oxford Street, W., December 16. P. W. SQUIRE.

The Pharmacy Bill.

SIR,—In my judgment there is a much stronger case in favour of a companies clause than a curriculum clause. A companies clause would be an attempt to stop a leak in the pharmaceutical ship that has sprung since 1868. On the other hand, what are the real arguments in favour of a curriculum as proposed in the draft Bill? So far as I know, the Privy Council has not suggested that registered chemists, as a body, are incompetent, and that therefore a more thorough technical training is desirable. I think that such an imputation would be unjust. The Act requires men to be qualified for a purpose—viz., the safety of the public. It is manifest that it is the keynote of the 1868 Act. Parliament cannot be expected to make for merely professional status.

Perhaps a reason for the curriculum is to keep men out of the trade. If so, why not make the Preliminary examination stiffer? As it is, any schoolboy of sixteen who could not pass it ought to be ashamed of himself. Another reason may be to increase the percentage of "passes." The large proportion of failures in the Minor is certainly no credit to the younger members of our craft, and all of us, moreover, know of some duffers who manage to slip through. It would be found that a duffer could "curriulate" too.

Why should the examinations be held more than twice a year? Other examining bodies do not meet so often. I am strongly of opinion that the frequency with which the opportunity of passing is presented to the student is a fruitful reason of failure. The expense of conducting the examinations would be decreased, and we should not hear so much of candidates "having a shot at it, anyhow, to see what it is like."

We must not forget that the best—or what ought to be the best—curriculum is in force now. I mean the three years' term of apprenticeship; but I am bound to lay this charge against many principals in respect of apprentices—that it would be almost impossible for a youth to be engaged with them in the routine of business and be in reality taught

less. A vague notion exists that a metamorphosis comes over a young man between the last day of apprenticeship and the first of assistantship. "Thou knowest not now, thou shalt know hereafter." But how?

Clifton, Bristol, Yours faithfully,
December 13. T. C. RICHARDS.

Pharmaceutical Education of Ireland.

SIR,—In your journal of December 6, I regret to see an embittered letter of Mr. Brunker's regarding pharmaceutical education in Ireland.

It is strange that since the resignation of Mr. Brunker and Mr. Allen such animosities should be manifested to the Society.

The tone of Mr. Brunker's communications your readers are already cognisant with by his letters of July 15 and August 4 of this present year, inserted in your journal.

In your issue of May 17 the correspondence between Sir William Kaye, C.B., and Mr. Allen has been published.

The objections raised have been frequently answered.

1. Owing to there not being a quorum at the January meeting no council was held, so that a resolution could not have been submitted for the sanction of the Privy Council.

2. The Council never adjudicate on certificates, as there is a special committee for this purpose, and the power of passing or rejecting a candidate is entirely left to the examiners "in conference and jointly." (*Vide Calendar.*)

I merely relate these few facts: your readers can draw their conclusions as to why this gentleman wrote to Sir William Kaye without first drawing the attention of the Council of the Pharmaceutical Society to what he considered wrong.

As to the reference to the 100 hours being of doubtful utility, I would ask, Can anyone seriously think that 100 hours' work at the bench is sufficient to qualify a candidate as an analytical chemist? But I considered it a hardship to ask country candidates for the licence to take 100 hours' course, when it involved an attendance on two courses at a medical school, entailing double fees, and a prolonged residence in the large centres. However, the power of imagination is so great that at the annual meeting of 1888, as reported in your journal of October 6 of that year, the then President stated, "in the percentage of candidates who have passed, you have a practical illustration of the advantage of the change in the system of instruction."

As the rule only came into force in July of that year, no candidate for examination could have taken out the 100 hours' course, so they had the advantage of a system of instruction which they never received.

The comparison with the English Society is unequalled for, but everyone will agree in the desire that the Irish Society should have amongst its members men of such ability as adorn the Society in England and Scotland, not to speak of the financial position. But I doubt if the English body ever had to combat the determined opposition of their ex-Presidents.

The school now established, whatever its defects, has succeeded beyond expectation, and I can only reiterate what I said at the annual meeting, that, in the peculiarly difficult circumstances through which the Society has passed during the last twelve months, it is to be congratulated on having amongst its members such efficient conductors, both able and willing to take the management of the school, whose aim is to educate men not merely to pass their examinations, but to become expert manipulators.

It is, however, strange that the pharmacists of Great Britain should be asked for support in trying to prevent the degradation of pharmacy by one who wrote to a widely circulated public journal, wishing "bon voyage" to a Bill introduced into Parliament by those who at the time were the opponents of the Pharmaceutical Society, and which, had it become law without the modifications introduced and obtained by the Marquis of Waterford, would have been very detrimental to the interests of pharmacy in the estimation of pharmacists generally in Ireland.

Dublin Yours faithfully,
December, 1890. CHAS. EVANS, President.

SIR,—The letter of Mr. J. C. McWalter which you print in your last issue proves my case up to the hilt, if it proves anything at all.

Mr. McWalter, a licentiate, and, I fear, a fair type of a large class of licentiates, is, because he has passed his examination on easy terms, opposed to a higher educational standard. He plainly states his reason, too: he desires a *quid pro quo* in the shape of protection, and thinks that, if a higher standard is attained, a paternal Government is to rush to his support with a corresponding degree of special privilege.

He is quite unable to grasp the distinction between education and grinding, and until he and those who think with him do this there is little hope for the future of Irish pharmacy.

As regards the future, I cannot hope yet for such a sudden transition as the adoption of a compulsory curriculum in Ireland would involve, but I hope before many years to see the principle fully accepted. The way must first be paved by a general raising of the standard of pharmaceutical education, and this must come in spite of the *vis inertiae*—shall I say *vis obscurans*?—which now stands in the way. More serious difficulties have been overcome during the past few years in Irish pharmacy.

Mr. McWalter does not appear to be aware that at present the mutual admiration society of Harcourt Street does not admit within its charmed circle any independent critic who would be likely to brush off the bloom from its perfect self-satisfaction. Criticism must therefore come from without.

68 Grafton Street, Dublin, Yours faithfully,
December 15. J. E. BRUNKER.

Copper in Cereals.

SIR,—Letters have recently appeared in your columns bearing upon the above. It may interest the writers to hear that upon analysing a calculus extracted from the intestines of a horse that had died from inflammation and stoppage of the bowels caused thereby, I found it to contain copper equivalent to 25 per cent. cuprous oxide. This calculus weighed 17 $\frac{1}{4}$ oz.; its nucleus was an iron nail, around which a deposition consisting chiefly of the phosphates of ammonium, magnesium, and calcium, with vegetable fibre interlaced, had collected. It is not unlikely that the copper had been separated from the cereals in their passage through that particular part of the system where this stone was found, the presence of iron probably facilitating this.

Yours truly,
Harringay, December 13. H. H. ROBINS, F.C.S.

Removing Tattoo-marks.

SIR,—I beg to endorse all that Mr. Dodd has said regarding the possibility of removing tattoo-marks from the muscles of the hand without the use of the knife.

I had on my left hand two rings, as also my initials, having been tattooed in early youth. About four years ago I attempted the removal of the rings by means of nitrate of silver, which I am thankful to say it almost succeeded in doing, in fact they are only visible now on close inspection.

Singular to say, two days previous to your answer to "Lilian" appearing in THE CHEMIST AND DRUGGIST I had started the nitric-acid process on the initials embedded in the muscular part of my left hand between the thumb and fore-finger in a similar manner to that recommended by Mr. Dodd, with the exception of allowing it to remain ten minutes (which was the extent I could endure the pain) instead of 1 $\frac{1}{2}$ minute. It has now formed into a deep-seated scab, which on its removal I hope will contain the tattoo-mark.

After the wound has healed I shall be in a position to say with what degree of success my labours have been attended. In the meantime I will content myself by giving my *opus operandi* for the benefit of those who may wish to try it. Get a match, and taper it to a point; apply the nitric acid with this, allow to remain on ten minutes, then wash with a little clean cold water. On the second day the strong inflammation will have subsided, and a scab will be beginning to form, which is not of a very presentable appearance, being a dirty yellow due to the HNO_3 . Cover with a piece of court plaster until properly formed; then poultice with boiled bread-and-milk until thoroughly clean, and finally dress with oil carbolic 1 in 20 to prevent scar.

Yours truly,
NEIL C. SINCLAIR.

1 Blue Bell Hill, Nottingham, December 16.

"Rank Socialism."

SIR.—Permit me to express my gratitude to "Silence is Golden," who, in a spirit of paternal rebuke, has favoured us with the aspect of this question as it appears from the standpoint of a pharmaceutical employer. I could have wished he had further favoured me by stating what the mark is which he considers I have overshot. It can scarcely be justice which is overreached, for, as the greatest genius of this century tells us, "the liberty of every citizen ceases where that of every other citizen begins." Can it be indefensible prejudice for that precedent which is said, with too much truth, to be the Englishman's god? Mr. Herbert Spencer, in his able dissertation on "Justice," published this year, says:—"The workman who wishes to lay down the terms of his employment is still regarded as a blackleg." Your correspondent admits that "assistants have rights as well as employers." This is a liberal view, though not quite "rank socialism"; but from his subsequent remarks it is evident that he considers assistants' rights should be purely theoretical: they should be satisfied to know that they have rights.

Your correspondent further says:—"Of course, the assistants of to-day are the employers of the future; but surely I would not go so far as to propose placing employers at the mercy of 'all sorts and conditions of men' for a 'character.' " This implies that assistants are "all sorts and conditions of men," but on becoming employers they are at once transformed into the impeccable individuals who comprise that sublime community whose elevation of character precludes the necessity of "any check of self-interest" to regulate their conduct towards assistants. It is only the assistants "whose mouths must be held with the bit and bridle." No wonder the latter feel impatient to get shops of their own.

If this gentleman who has employed eleven assistants at once has met with some of the best men he could possibly wish for, why does he ask if it is to such men as the uninitiated thief, whom he subsequently describes, that I would have him apply for a character before becoming his assistant? Surely amongst the others there would be at least one righteous man to whom he could fearlessly refer. No assistant possessed of common sense would attach any importance to the statement of one who had been found dishonest.

What means of redress has an assistant if a dis honourable employer from malevolent motives give him such a reference that no one will engage him? How the fact that an employer is legally responsible for the error committed by an assistant, who is practically his property, is any reason why the latter should be required to furnish references which "will bear the strictest investigation," while he himself goes in the dark and places his reputation, which is his entire capital, in the hands of those who once were, your correspondent admits, "all sorts and conditions of men," I fail to see. When Justice turns on a new lime-light, as a necessary consequence those whose only idea of justice is selfishness feel slightly apprehensive; but can your correspondent advance any substantial reason why honourable employers should have anything to fear from, or any valid objection to, such a mutually equitable arrangement as a reference on each side? Surely no system can truthfully be called "just" which gives one individual, and one class, an immense balance of power over another. Silence may be synonymous with cowardice, but "fiat justitia ruat cælum" is a maxim of which none need feel ashamed.

Yours respectfully,
FAIRPLAY. (199/40.)

SIR.—I heartily agree with "Fairplay," and believe that the day is surely coming when we shall see his suggestion carried out. It seems to me that "Silence is Golden" has completely forgotten that as things are now assistants are "at the mercy of all sorts and conditions of men" for a character. I know a case of an employer who had two assistants following one another. Both went to him with first-rate references; both remained with him for about three months; one left of his own accord, and the other received notice without any reason being given. And yet this man refused to give a reference of any kind—good or bad—

to either. I know, too, that it is a common thing with some employers, when they do not wish to part with an assistant, to say, "Well, if you leave I shall not give you a reference." I would remind "Silence is Golden" that the Old Book tells us that, although there is a time to be silent, there is also a time to speak.

Yours faithfully,

ASSISTANT. (200/9.)

Mr. B. T. Ord writes that his new business in Gateshead is in Redheugh Road, not in Redcugh Bridge Road, as was stated last week.

Mr. F. B. Wride, jun., Southampton, writes to say that at the meeting for the consideration of the Wednesday half-holiday which we mentioned last week, there were 10 present, not 9 as we were informed, and that the voting was 7 for, and 3 against, the resolution. Further, that many who were unable to be present wrote in approval of the intention of the majority.

LEGAL QUERIES.

196/38. *T. S.*—It is impossible to say whether a court would regard chlorodyne lozenges as poison within the meaning of the Pharmacy Act if a case were brought before it. Read the section on "Preparations of Poisons" in the DIARY, page 325.

197/55. *Lettered Bottles.*—The Merchandise Marks Act would apply to bottles of cod-liver oil, bearing your name, filled and sold by other persons, as well as to aerated waters, if you could show that the oil which you sell in such bottles is of your own production or preparation. You might very likely get a verdict without proving this, but we think there would be a strong case against you if the point were raised in defence. If you do not prepare the oil yourself it is by no means certain that you are not infringing the provisions of the Act yourself.

193/61. *Hard Times.*—Your appeal was, as we understand, against your assessment, that is, in respect of the anticipated profits of the current year, the tax for which will be payable on January 1. If you can prove that you have overpaid in any year, and wish to claim repayment, you must, during or at the end of that year, give notice to the surveyor of your district, and a day will be fixed for hearing your appeal on this payment. It is within the power of the Commissioners to order a repayment of so much of that year's payment as they may think right. Claims on exemptions or on duties paid in duplicate can be considered for three years back.

200/17. *T. F. W.*—Such is the law. There is no analogy between Gregory's powder and Lamplough's saline, which was declared on a technical point to be not liable by a law court.

DISPENSING NOTES.

The opinions of practical readers are invited on subjects discussed under this heading.

Quinine Mixture.

196/62. *Nemo* asks how to make the following mixture clear without acid:—

Ammon. chlor.	..	..	..	..	3j.
Ammon. bromid.	..	..	..	..	3j.
Tr. gelsemifl.	..	..	..	..	5iiss.
Quininæ sulph.	..	..	..	..	3ij.
Spt. chloroformi	..	..	..	..	3ij.
Syr. aurantii	..	..	..	..	3j.
Aqua ad	..	..	..	..	3vj.
M. Ft. mist.					

[There is no way of dispensing the mixture so as to hold the quinine in solution without acid. Five ounces of water

will dissolve only about 4 grains of quinine sulphate. The hydrochlorate of the alkaloid would go well with the chloride and bromide of ammonium, and would give a clear mixture.]

What was Meant?

SIR.—The following prescription has been handed to me to dispense:—

Pil. carb. ferri nascent 100.

(Signed) R.J.

No directions added.

Is "nascens" ever used for "recens," or what else can it mean?

Your's respectfully,

RUSTICUS. (177/66.)

[Blaud's pills may be said to contain nascent ferrous carbonate, but we should think fresh pil. ferri carb. B.P. was meant.]

177/6. Surrey.—Get the blue pill well rubbed down with the ipecacuanha and the powders for the rhubarb pill; then mass with fresh confection of hips and 3 drachms of glycerine.

193/72. J. Murton.—(1) The best way to deal with cascara sagrada pills is to coat them. (2) The question as to what should be dispensed for "chlorodyne," so ordered in prescriptions, has been discussed in this journal, and a large majority decided for Dr. Collis Browne's preparation. "Chlorodyne" is not a synonym for "tr. chloroformi et morphinæ."

MISCELLANEOUS INQUIRIES.

Correspondents who ask replies to be inserted "this week" or "next week" are reminded that we do not guarantee replies, and that their insertion depends upon the space at our disposal for such matters. It is generally impossible for us to find room for queries the same week they are received.

A large number of correspondents ask us for formulæ and other information already published in this journal. It is not fair to more careful readers that we should frequently repeat such information, and so long as the back numbers containing the formulæ or replies required are in print we must decline to do so. Back numbers of our weekly issue can be obtained from the publisher at 4d. each.

Correspondents who have made inquiries regarding the following subjects will find the information in the numbers indicated.

192/32. Cupri Sulph.—Parrish's Syrup.—December 7, 1889, page 813.

14/28. Fur.—Indian Cerate.—February 15, 1889, page 250.

190/44. T. A. B.—We replied twice to the question in November.

191/17. Leo.—It is useless to write to us if you do not send your name and address. It only wastes your time and ours.

184/41. M. K. & B.—The sample is a strong tincture of quillaia—say, 1 in 4—made with proof spirit. Most of the preparations used for producing froth on beverages are of this nature, and all depend upon the presence of saponin, derived from one natural source or another.

193/67. Justitia.—The curriculum is not yet authorised. If it should be, ample time will be given for men to pass the examinations under present conditions.

187/65. Countryman.—Myrrh and guaiacum have something in common in respect of the fact that for making mixtures they should be freshly ground. Resins, such as they, are quickly and materially altered by exposure to the air, and obviously the change is greater in powdered resin. That alone accounts for the difference which you have observed in making Guaiacum Mixture from lump and powdered gum resin. The colour of the mixture is darker than grass green, but not so dark as the cover of the B.P., although it varies with different samples of guaiacum.

191/74. Alopecia.—Lanoline is very suitable for combining with any of the common hair-growth-promoting substances. For instance, a drachm of vinegar of cantharides to each ounce would make, when suitably perfumed, a very good preparation, and the addition of a grain of pilocarpine would improve it. Lanoline itself is rather stiff: 3 parts of it and 1 part of almond oil would be better.

192/31. Dorset.—We have not seen the preparation. What is it like?

3/11. Ferrum.—Glycerine is the only thing we can suggest to prevent the water in Hot-water Pipes Freezing. It would not be expensive—1 part to 5 of water would do—and it would never require to be renewed, as it would not evaporate.

101/29. Butter.—The sediment in the ess. white rose is the stearoptene of the otto, and is perfectly inodorous. Filter.

193/25. Millis.—The presence of added Glucose in Honey can be detected by treating, say, half a drachm with a drachm of water, and adding 5 drachms of methylated spirit. If the honey is pure, the solution is clear; if there is added glucose in it, there is a turbid precipitate.

187/34. A. E. S.—As the number is out of print, we repeat the formula for Gripe Water:—

Bicarbonate of potash	1½ drachm
Bromide of potassium	1½ "
Syrup	4 oz.
Dill water to	8 "
Mix.	
Dose: A teaspoonful.	

2/28. Assistant.—We have no evidence of a special demand for English assistants in the United States or Canada. The examination described by Mr. Nichol was the State examination for chemists and druggists for New York State.

196/2. F. R.—You are eligible.

178/26. Taproban.—(1) We inquire for this. (2) You will find an ordinary still with block-tin worm as good as anything for making distilled water, provided you have abundance of cold water for condensing. The one you mention is good enough for small quantities, but we prefer the worm condenser. (3) Yes, for small quantities it is as good as anything, and very cleanly. (4) S. Maw, Son & Thompson offer Soxhlet's milk-sterilising apparatus, and there is another made by Gronwald & Oehlmann, of Berlin. We should simply boil the milk well. There cannot be much curd left in it after that. Sterilisation is a little overdone. (5) We do not know anyone who could advise you. Your best plan would be to study our DIARY advertisements well.

198/23. J. Burt.—A minim of oil of lemon is intended in the paraldehyde draught. The error has been corrected in subsequent editions of "The Art of Dispensing."

193/31. *H. P.* wishes to know "what preparation is used for Preventing Shop Windows from Steaming and frosting in cold weather." Glycerine is the only application which is at all successful in both directions, but it is objectionable in many respects. The perfect remedy is thorough ventilation; all sorts of ideas have been put forward, some of them complicated, but any of them which are successful depend upon ventilation. The reason for the deposit of moisture on the glass is well known—the air inside shops is generally warmer, and therefore is more highly charged with water than the outside air. The cold glass really acts as a condenser, just in the same way as a spectacled person going into a warm and imperfectly ventilated room or shop finds his spectacles suddenly covered with condensed moisture. The farlight is the remedy for the window difficulty. Keep this always open a little, and also have a row of holes bored through the top of the window-sash, so as to establish a steady current from the inside to the outside, and a few holes at bottom, preferably an opening in the wall below the window, to allow air to come in from the outside.

197/1. *Delta.*—The logwood and oxidants give the boot-dressing the black colour. Seed lac is not shellac. Better not "spoil the ship for a ha'porth o' tar," which you will do if you attempt to alter formulae for the sake of a trifling saving, such as you would do by substituting an inferior quality of an ingredient for a better.

196/45. *H. Mitchell.*—*Cocdeia Jelly.*—Hardwick's formula is as follows:—

Cocdeine	72 grains
Citric acid	720 "
Refined gelatine	6 oz.
Glycerine	33 "
Oil of lemon	1 drachm
Balsam of tolu	2½ oz.
Water	60 "

Boil the tolu in the water, as directed in the Pharmacopœia under "Syrupus Tolutannus," until it measures 30 oz. Filter, and in 25 oz. of the filtered liquor soak the gelatine, heating gently until it is dissolved. Then add the glycerine. In the remaining 5 oz. of liquor dissolve the cocaine and citric acid, add to the jelly mixture, and finally add the oil of lemon, mixing the whole well. Pour into bottles while hot.

The dose of this is 1 drachm, and it is a very good remedy for the cough of consumptives and for other chest complaints.

197/5. *G. R. B.*—We have no means of knowing.

197/28. *J. Stewart.*—Horse Castor is used for taming horses. It is an excrescence which grows on the forelegs of horses, and has a peculiar musky smell, which presumably constitutes the attraction.

197/17. *C. K.*—We do not know what you mean by fettle syrup or cordial. It is evidently a localism, just as the word "fettle" is a Scoticism.

196/57. *Sapolio.*—See page 350 of the 1891 DIARY.

197/49. *Nemo.*—Clove Cordial.—Oil of cloves, ¼ oz.; S.V.R., 5 pints; syrup, 11 pints; colouring, a sufficiency. Mix. Peppermint Cordial.—Oil of peppermint, 1 drachm; S.V.R., 3 pints; syrup, 13 pints. Mix. The syrup for these cordials is made by dissolving 10 lbs. of sugar in a gallon of water.

197/64. *W. G. Machin.*—Thermometers used for taking the temperature "in the shade" are generally placed in a box with latticed sides, which permits free circulation of air, but no access of direct sunlight. This special box is not, however, necessary for ordinary observations; the thermometer may be placed anywhere in the shade, that is, towards the north, under cover.

17/37. *A. B.*—Anti-calcaire is patented. It is said to contain alum and borax. A powder with similar properties may be made by mixing 3 parts of dried slaked lime and 2 parts of dried carbonate of soda. A teaspoonful of this goes to a ewerful of water.

199/14. *McPherson.*—All information regarding the pharmaceutical examinations is given in the Educational number, September 27.

198/9. *G. R. (Alexandria).*—"Pil. quinine, ferri, et zinc valerianatis (Schieffelin)" contain 1 grain of each valerianate in one pill. They are made by W. H. Schieffelin & Co., of New York.

195/33. *Reigo.*—Obviously "Malabar cardamoms."

193/61. *Ture.*—Caramel would be the safest thing to colour tincture of opium which is not dark enough; but the addition of anything is objectionable. The tincture will darken if kept for a few months.

199/25. *L. L. (Barcelona).*—Saccharin.—The sole agents for saccharin in this country are Messrs. Wilson, Salmon & Co., of 18 Billiter Street, London, E.C. But for your purposes we should think you had best apply to wholesale houses. Saccharin is rendered soluble in cold water by the addition of 1 part of bicarbonate of soda to 2 of saccharin.

Information Supplied.

Venice Treacle.—Mr. J. Dove, South Milford, sends us the following recipe, which he says was very popular in Lincolnshire some fifty years ago among the lower classes for many common complaints:—

Pulv. piper. Jamaic.	..	..	..	3vj.
" grana. paradisi	..	..	..	5vi.
" zingib. Jam. opt.	..	..	..	3vj.
" serpent. virgin.	..	..	..	5j.
" opii.. .. .. ..	..	..	..	gr. 63
Mel. ang. .. .. .. ..	..	..	..	3ix.

Mix.

A correspondent in THE CHEMIST AND DRUGGIST was inquiring what Venice treacle is. I give the names as they are spelled in Culpepper. [Mr. Sheel sends us a copy of Culpepper's recipe for theriaca andromachi, or Venice treacle.] In my experience I have found Venice turpentine to be the article wanted when Venice treacle was asked for.

LOW FELL.
ROBERT SHEEL.

Faotitious Neatsfoot Oil.—I have heard of neatsfoot oil being prepared extemporaneously in country districts by the addition of a few drops of liq. potassa to colza oil (5j. to the pint). In fact, in one case where the genuine article was supplied to a customer who had on previous occasions received the faotitious, he remarked on coming for his next supply that the last lot was not nearly as good as usual.—

Exeter, December 15.

P. F. ROWSELL.

Information Wanted.

[Replies to the following requests are solicited by correspondents of THE CHEMIST AND DRUGGIST.]

165/45. Works on Southern Persia.—*M. M. A.* would like to know which are the most trustworthy reference books (in the English language) among those referred to in Mr. Jackson's article on "Manna-yielding Plauts" (THE CHEMIST AND DRUGGIST, June 28, 1890).

196/58 wishes to know where he can purchase and see in operation a machine for making chocolate drops, such as are sold by confectioners.

177/6. "Wheatina." Where obtainable.

178/26. Butter-flavouring. Where obtainable.

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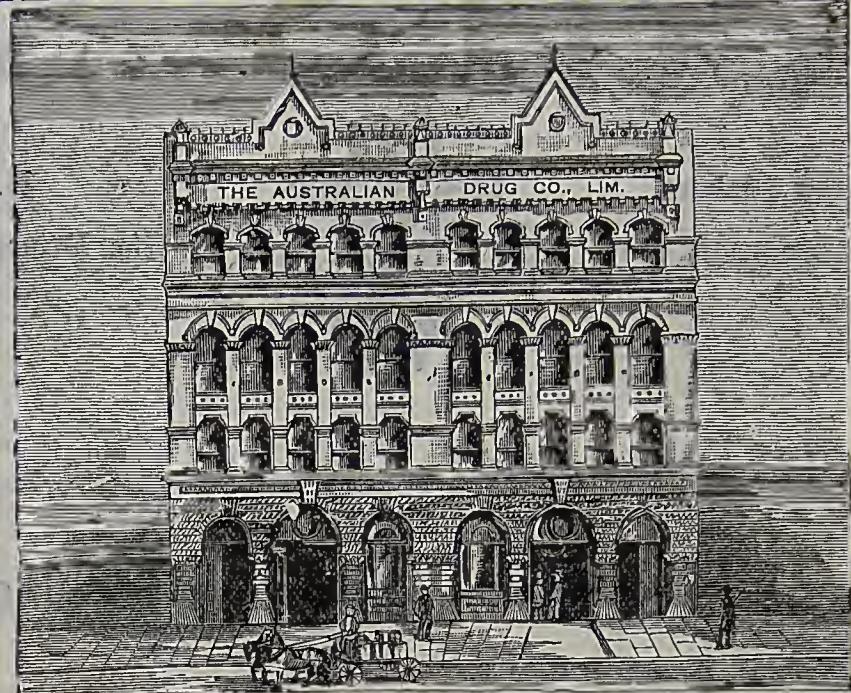
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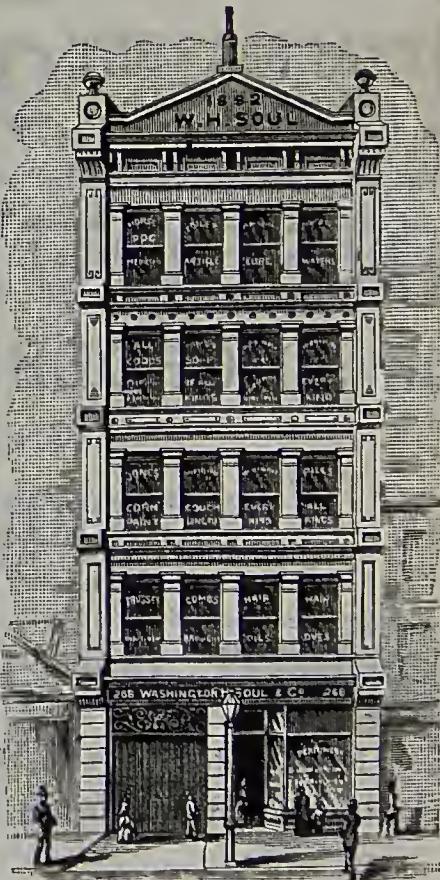
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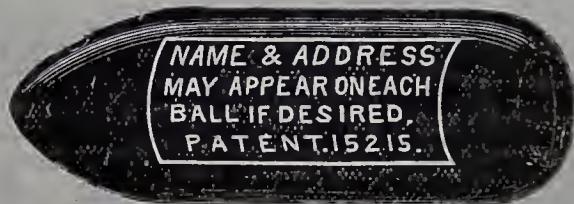
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Each drachm contains in a concentrated form, besides the fluid pepsine a full dose of Schacht's Liquor Bismuthi. Dose: One drachm. In $\frac{1}{2}$ lb. and 1 lb. bottles.

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A pleasant and active form of Cascara Sagrada. Dose: One to three teaspoonfuls diluted. In 4 oz., $\frac{1}{2}$ lb. and 1 lb. bottles.

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LONDON MEDICAL RECORD REPORT.

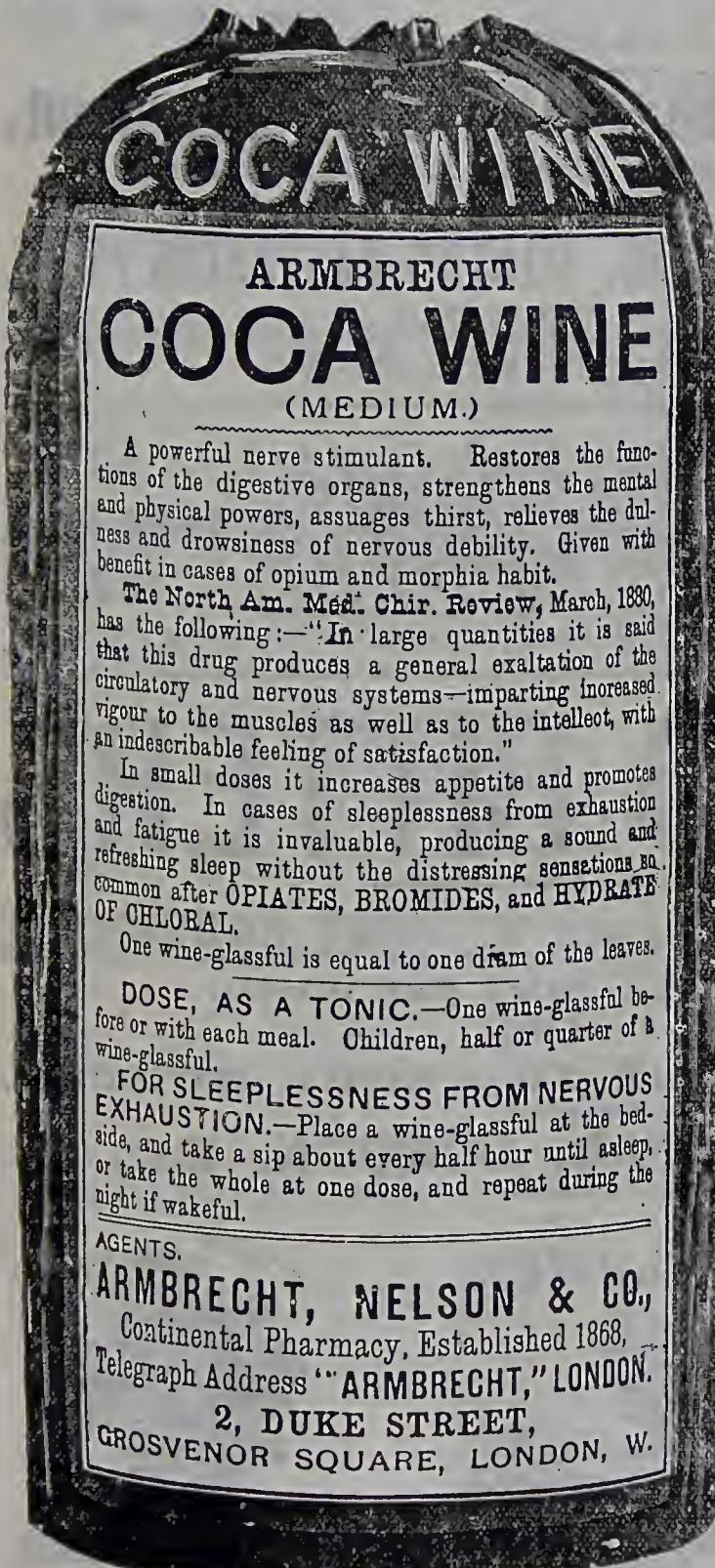
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Or for making Coca Wine by adding five drops (or more) to Wine.

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See pages 37, 38, 39, 40, 41, 42, 43, 44 in 1891 Diary.

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[2]

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Importers of Cod Liver, Castor, and Olive Oils; Extra Super Essence of Lemon and Bergamot; Otto de Rose, and all Essential Oils; Valentia Saffron; Vanillas; Fruit Essences; Carmine; Aniline Dyes; Bees' Wax, &c., &c.

Special Agents for Sicilian Sublimed Sulphur in 2-cwt. bags, and Rolled Sulphur in 3-cwt. casks. Most Favourable Quotations can be given on application.

NEPENTHE.**THE SAFEST AND BEST PREPARATION OF OPIUM.**PRODUCES NEITHER HEADACHE, SICKNESS, NOR CONSTIPATION.
 PREPARED EXCLUSIVELY FROM OPIUM.

Although many new hypnotics and analgesics have been recently introduced, NEPENTHE still holds its position as THE hypnotic and sedative par excellence. "Nepenthe" is registered under the Trade Marks Act, and is our sole property. No other preparation should be substituted when Nepenthe is ordered in a prescription.

Sent out in bottles bearing a label in white letters upon a green ground. We prepare also Double Strength Nepenthe, and Glycerole of Nepenthe (eight times the single strength) for hypodermic injection.

PRICES AND TERMS ON APPLICATION.

FERRIS & CO., WHOLESALE AND EXPORT DRUGGISTS, BRISTOL.

WILLIAM FOX & SONS,
WHOLESALE DRUGGISTS, &c.,

109 & 111 Bethnal Green Road, LONDON, E.

Cabinet Varnishes, Polishes, Glaze, Finishing Spirit,
 Glues, Wood Stains, Gums, Resins, Shellacs.

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"FOR THE BLOOD IS THE LIFE."

CLARKE'S WORLD FAMED BLOOD MIXTURE THE GREAT BLOOD PURIFIER.

Trade Mark—"BLOOD MIXTURE
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The Celebrated CURE for
Scleroma, Scurvy, Eczema
Blood and Skin Diseases,
and Sores of all kinds

WHOLESALE OF ALL THE WHOLESALE HOUSES

SOLE PROPRIETORS:
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Counter Bills and Posters, with Name and Address
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CAUTION.—The Proprietors will take immediate proceedings against all persons pirating their Trade Mark, "Blood Mixture," Labels, Wrapper, &c., or Advertisements, or in any way infringing their rights.

MILLAR'S BRITISH WINES. ORANGE (suitable for Quinine), GINGER, RAISIN COWSLIP, CHERRY, &c. A. MILLAR & CO., Thomas Street, DUBLIN.

Sole Agents for London and District—H. J. BOYDANT & CO., 75 Acre Lane, Brixton, S.W.



"THE LEICESTER" IMPROVED ADHESIVE PLASTER

On Fine Flesh-coloured Cambric,
is found the best, after trying other makes (in the first case, nearly every known plaster). A well-known actor said he had the good fortune to meet with it in the South of England, and had inquiries for it wherever he went since. It is the only plaster he can find to answer for fixing false hair, &c. A chemist in the North wrote and said a lady violinist would have nothing else; she uses it to make a pad to protect her fingers. A chemist in Yorkshire has a customer who uses plaster to keep his eyes open, and nothing will hold the lids up so well as "The Leicester" Improved Adhesive Plaster on Fine Flesh-coloured Cambric. Surgeons in all parts are frequently commanding it. The Sale rapidly increases.

AROMATIC TINCTURE OF IRON 'ATHENSTAEDT.'

(1) Contains a constant percentage of 0·2% Metallic Iron.
(2) Is most agreeable to take, and free from the inky
flavour common to other Iron Tonics.

(3) Stimulates the Appetite and expedites the Digestion.
(4) Does not affect Teeth.
(5) Is free from Alkali.

SAMPLES AND PAMPHLETS FROM THE SOLE AGENT:—

[3]

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For terms and particulars, apply to the Proprietors—GUY'S TONIC COMPANY, 4 Ludgate Circus, London, E.C. It may also be obtained from the usual Wholesale Houses.

Guy's Tonic

Guy's Tonic is sold Retail at 2s. 9d. per bottle. One size only prepared. We are co-operating with Chemists and the trade generally arranging satisfactory terms in return for general enterprise on our behalf.

The Mormon Elder's

DAMIANA WAFERS THE MOST POWERFUL INVIGORANT EVER PRODUCED.

Permanently restores those weakened by early indiscretions, imparts youthful vigor, restores vitality, strengthens and invigorates the BRAIN AND NERVES. A positive cure for IMPOTENCY. Prompt, Safe, and Sure. 4/6 per box, 6 for 22/6. Usual discount to the Trade. Send for Circular.

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Hovenden & Son, Sanger & Son,
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all Wholesale Druggists.



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RADAM'S
MICROBE
KILLER.
LONDON,
11, OXFORD STREET,
CHICAGO,
U.S.A.
Special Climacteric
and Invigorating.
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ALL
CURES
FOR
DISSEASES.

WITHOUT A RIVAL!

From the time Medicine was first discovered by the Ancients down to the present none ever made such progress as

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They stand without a rival, and have by far the largest sale of any Patent Medicine in the World. This is a fact which every business man is bound to admit.

All Foreign Dealers will find BEECHAM'S PILLS the most Saleable Medicine in the Market.

The health-restoring and life-giving properties of these Pills are such as to increase their demand every year.

The words "BEECHAM'S PILLS, SAINT HELENS," are on the Government Stamp affixed to each box.

Prepared only and sold by the Proprietor, THOMAS BEECHAM, ST. HELENS, LANCASHIRE, ENGLAND, in boxes at 1s. 1 $\frac{1}{2}$ d. and 2s. 9d. each, with full instructions for use.

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76 CHISWELL STREET, late 10 Bow Churchyard, LONDON,
SOLE MAKERS OF THE

ORIGINAL BATEMAN'S DROPS & DAFFY'S ELIXIR.

Proprietary Medicines, Perfumery, Mineral Waters, Lozenges, Druggists' Sundries, and Miscellaneous Articles.
PRICE LIST FREE ON APPLICATION.

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Burchell's Anodyne Necklaces, Ford's Balsam of Horehound, Widow Welch's Pills, by Mrs. Smithers Oxley's Essence Ginger, and the preparations of Messrs. Hudson & Son, late of the Haymarket, London.

PRICE LISTS SENT ON APPLICATION. ORDERS CAREFULLY AND PROMPTLY EXECUTED.

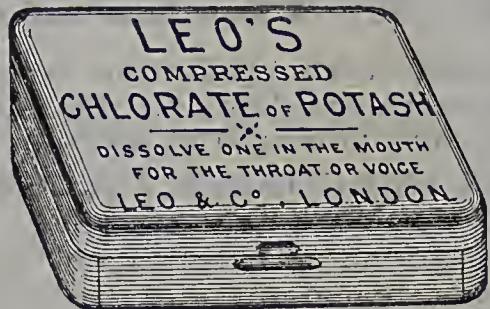
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Our Goods are guaranteed the Best of any of the cheap Compressed Goods in the market.

They are Supplied by all the Wholesale Houses.

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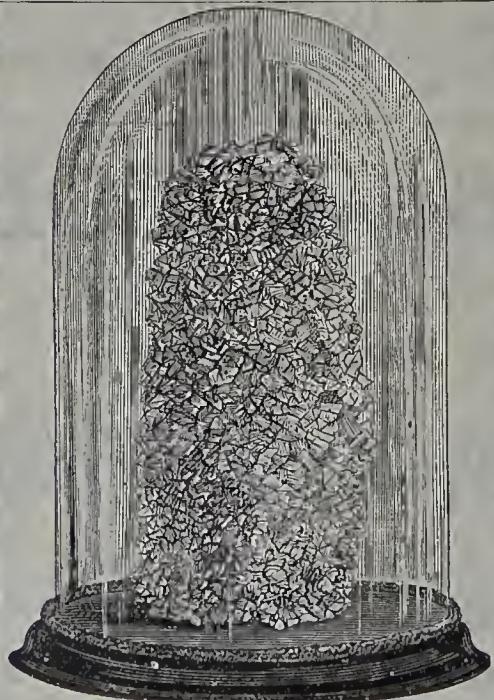
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SAVARESSE'S CAPSULES.

SANDAL WOOD; COPAIBA.

36s and 18s. per dozen.

SHOW CRYSTALS.



We are now able to supply immediately these attractive Adjuncts to the Price, complete with Mount and Glass Shade, 3ls. 6d., 2ls., 10s. 6d. each.

EVANS, LESCHER & WEBB,
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EVANS AND SONS (Lim.)

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For TWENTY-EIGHT YEARS has maintained its world-wide reputation as

THE ONLY SAFE RELIABLE PHOSPHORIC CURE for Brain Wreckage, Paralysis, Sleeplessness, Harassing Dreams, Premature Decay of Vital Power, and all Functional and Diseased Conditions of the System dependent upon the Deficiency of the Vital Forces. It

Cures Dyspepsia, Nerve and Heart Disease.

Cures Kidney and Liver Complaints.

Cures all Blood Disorders. Cures Consumption and General Debility.

Checks all Wasting of the Vital Forces from whatever cause arising.

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HEALTH, STRENGTH, & ENERGY.

Is the only Medicine of the kind or name awarded a Certificate of Merit at the Calcutta Exhibition 1883-4, where all Countries were Exhibitors, and the only Trade Mark—"PHOSPHODYNE"—Registered and Protected under the Trade Marks Act.

THOUSANDS of unimpeachable Testimonials from all parts of the World and from the highest Medical Authorities prove conclusively the Verdict Universal that in the World of scientific research no other Phosphoric Preparation has received such exalted praise and distinguished recognition.

Sold in bottles at 4s. 6d. and 11s. by all Chemists throughout the World.

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PROPRIETORS OF
FIELD'S SELECT PREPARATIONS
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Saline.
Liquid Extracts.
Glycerine and
Cucumber.
Concentrated
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Liq. Papain et Iridin Co.
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Is largely advertised in all the Medical Papers, and daily prescribed by Physicians; it will therefore be in the interest of Chemists to always stock a few bottles, which can be obtained of all the Patent Medicine Warehouses. The Wholesale and Shippers should apply for prices (packed in cases of Six Dozen Bottles, either in or out of Bond) to the SOLE CONSIGNEE FOR GREAT BRITAIN AND THE COLONIES—

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P.S.—Write for Catalogue of *Gabriel Jozéau*, which is the only complete list of French Medicines in the United Kingdom.



Retail Price, 45s. per Dozen, or

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SEND FOR SAMPLE GROSS.

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**INDIARUBBER
POROUS PLAISTERS.****STRENGTHENING, BELLADONNA,
AND CAPSICUM.**

Manufactured by

WILLIAM MATHER.

Chemists are respectfully informed that by purchasing one gross of any of the above their own Names and Addresses may be printed upon the wrapper and back cloth of each plaster.

PRICE, INCLUSIVE OF PRINTING, 24/- PER GROSS.

Subject to usual Discount, as per Price List.

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“AGREED AT LAST.”

THE Statuette, as drawing below, is effectively produced in Terra Cotta, the likenesses of the two great political leaders being most striking, and their expression clearly shows they have at last found a topic on which no difference of opinion can exist, viz., that “Hockin’s Acme Cones are the best.”

We present this striking group, which is 18 inches high, with all first orders for £2 10s. worth of our

“ACME” BRAND PURE MENTHOL CONES

(not more than £1 in value to be taken in 1d., 2d., and 3d. Cones.)

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NEW PATTERNS,
SPECIALLY
SALEABLE.

No.

*217F. Glass Show Bottle, with foot, as fig. 88, 1/8 per doz.

*217A. Glass Show Bottle, with foot, as fig. 161, 3/- per doz.

*214A. Glass Show Bottle, with foot, as fig. 161. This has a very large Cone. 4/3 per doz.

220. Cone Shape, as fig. 203, each in slide box, 1 doz. in Outer, extra size, 4/3 per doz.

*221. Large Flat Draughtsman, very large Cone (120 grains), 4/9 per doz.

222. Elegantly cut Show Glass Bottles, as fig. 222, 3 cuttings, 9/- per doz.

224. Enamelled Tin Box, Printing on box, 30 gr. Cone, 1/6 per doz.

* These are packed in 1-doz. Hanging Glass-fronted Boxes.



We only quote the most saleable patterns here. Detail of all shapes on application.

For Buyers who find 50/- worth too much, we shall be glad to send with an order for 25/- an OPAL GAS GLOBE, lettered as an Advertisement for Menthol, which makes a most striking and attractive addition to a Pharmacy.

HOCKIN, WILSON & CO.

13 to 16 NEW INN YARD, 186a TOTTENHAM COURT ROAD, LONDON, W.

CATALOGUE OF SUNDRIES AND SPECIALITIES FORWARDED ON RECEIPT OF BUSINESS CARD.

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1d. CONES.

No.

219. Willow Boxes, bottle, barrel, or acorn shape, 3 doz. on card, one sort or assorted, 6/- gross.

2d. CONES.

202s. Polished Willow Boxes, bullet shape, 2 doz. on card, 12/- gross.

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207s. Polished Willow Boxes, Draughtsman shape, 18/- gross.

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88G. Polished Soft Wood, pedestal shape box, 80 grain cones, 1 doz. on card, 2/9 doz.

CHEST PROTECTORS

Before placing their season's orders for Chest Protectors and Respirators, Chemists are respectfully invited to write to us for quotations.

Manufacturing these goods ourselves, we are able to quote very favourably to buyers, and guarantee that the best quality materials are used. The Chest Protectors can be had of Red or White Felt and Natural Wool.

THOMPSON, WALTERS, HOLE & CO., LTD.
CURTAIN ROAD, LONDON, E.C.



SPECIAL OFFER.

ONE GUINEA.

GENTLEMEN,

We are daily receiving so many orders from all parts of the country for **Henri Frères' Soap**, and particularly so many repeat orders, that we are induced to make a Special Offer, by which you can obtain a small sample Selection without laying in a heavy stock, and on receipt of a Cheque or Postal Order for **£1 1s.** will send, carriage paid to any port or station in Great Britain and Ireland, a Case containing Seven Dozen **Henri Frères' Soap**, being One Dozen each of the most saleable varieties.

We do not make this offer at all as a matter of profit, but simply as an advertisement, being convinced if you once introduce this line you will order it again and again. So confident, indeed, are we, that in the event of your not being pleased with the Soap, we shall be glad to return the Guinea and allow you to send the Soap back.

Read what some of our friends say :—

“I never had a soap sell so well as Henri Frères’.”

“My customers come back again and again for it”

“Please send on the Soap on order at once. My customers won’t have any other.”

“I sell ordinary 6d. Soaps at $3\frac{1}{2}$ d., but I always get 5d. for Henri Frères’.”

“When do you expect Henri Frères' Soap in? I want my order at once. It may interest you to know I have been using one tablet ever since your Traveller was here—over two months ago—and it isn’t finished yet.”

We need say no more, but simply ask you to try the Soap yourselves. We are sure you will find it a good and profitable line.

Faithfully yours,

AYRTON & SAUNDERS.

The Assorted Case includes Glycerine and Cucumber, Cold Cream and Honey, Grey Oatmeal, Sulphur Cream, Pine Tar, Carbolic and Glycerine, Transparent Glycerine, all Everyday Selling Soaps.

Postal Address—
AYRTON & SAUNDERS, LIVERPOOL.

Telegraphic Address—
SUNDRIES, LIVERPOOL.

Telephone Number—
423.

MANUFACTORY.

"Eclipse" Glass Works,
Lea Bridge, Clapton, London, E.

Prize Medal, Adelaide Exhibition, 1887.

Award of Merit, Melbourne, 1888.

OFFICES AND WAREHOUSES:

881-3 KINGSLAND ROAD,
LONDON, E.

E. A. HEARN & CO.

WHOLESALE AND EXPORT GLASS BOTTLE MANUFACTURERS.



Makers of EVERY DESCRIPTION of Glass Bottles, either PLAIN or STOPPERED, in

WHITE FLINT, AMBER, BLUE, MEDICAL GREEN, ACTINIC GREEN, &c., &c.
OR ANY COLOUR MADE TO ORDER.FEEDING BOTTLES IN ALL SHAPES,
PLAIN NECKS OR SCREW STOPPERED.SPECIALITY.—First-class Quality at Reasonable Prices.

GLASS BOTTLES

BEST OF THE
QUALITY.

DISPENSING, PICKLE, SAUCE, OIL,
MINERAL WATERS, &c., &c.

SAMPLES AND PRICES ON APPLICATION.

E. YOULDON,

EAST LONDON GLASS BOTTLE WAREHOUSE,
36 to 40 Great Gardiner Street, Whitechapel,
LONDON, E.



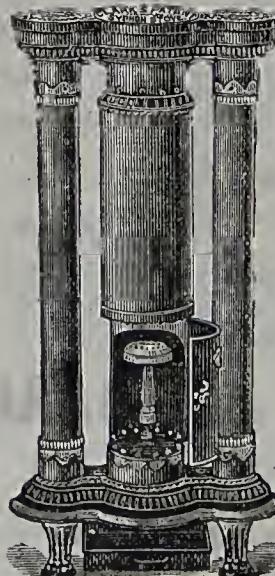
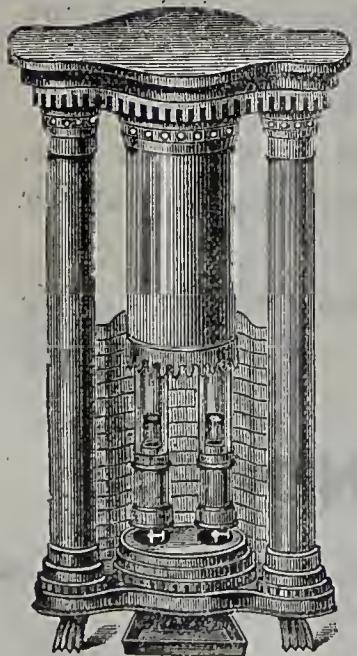
TO CHEMISTS AND DRUGGISTS.

AGENTS WANTED FOR THE SALE OF CLARK'S PATENT

"SYPHON" (REGISTERED
TITLE) HYGIENIC CONDENSING GAS HEATING-STOVES.

NO FLUE REQUIRED. ARE FREE FROM SMELL OR SMOKE.

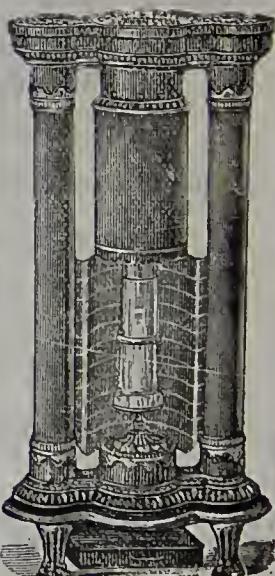
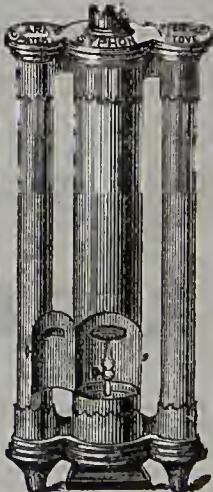
All injurious vapours are reduced to harmless liquid inside the Stove, and passed out at foot into a tray provided for that purpose.



For Use in Hospitals, Sick
Chambers, Bedrooms, Halls, Con-
servatories, Churches, Schools, &c.

Specially
suitable for
patients
suffering from
Bronchial
affections, as a
moist
atmosphere
is obtainable
when
required.

For Terms,
Particulars,
and Prices,
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Telegraphic Address—"SYPHON STOVES LONDON." Wholesale Agents—Messrs. MAW, SON & THOMPSON, Aldersgate Street, London, E.C.



PHILADELPHIA, 1876.



MELBOURNE, 1880.



MELBOURNE, 1888.



SYDNEY, 1879.

KILNER BROTHERS GLASS BOTTLE MANUFACTURERS.

NO. 3^A GREAT NORTHERN GOODS STATION, KING'S CROSS, LONDON.



PARIS, 1878.

Telegraphic Address :

"BOTTLES LONDON."



LONDON, 1862.

Telephone

No. 7509.



PARIS, 1875.

MINERAL WATER BOTTLES.

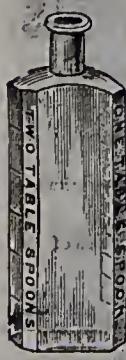


Codd's, Bulbs, and all the best stoppered kinds; full size and splits. Also CORK Bottles in all sizes and shapes.



VAN BOXES and CASES to contain above and many other kinds of bottles.

For full particulars see Special Illustrated Catalogue of Mineral Water Bottles, Boxes, Siphons, &c., issued each Season.



DISPENSING BOTTLES.

In Green and White Flint. All the required sizes. Flat, Oval, Round, Octagon, and Direct Square. The "K" brand, being well known, is in constant and large demand.



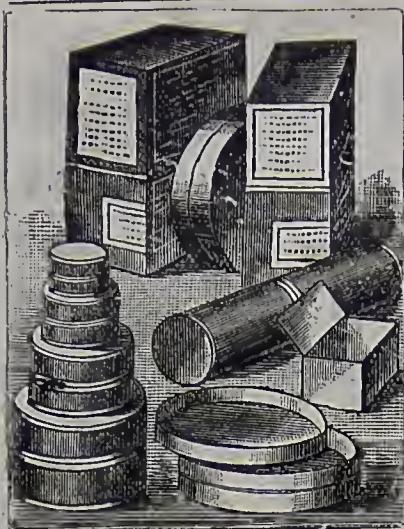
FEEDING BOTTLES.

Fitted in a large variety of styles to suit all classes of buyers.

Careful attention is given to quality of Bottles and Rubber.

Increasing sales testify to the satisfaction given by these Feeders.

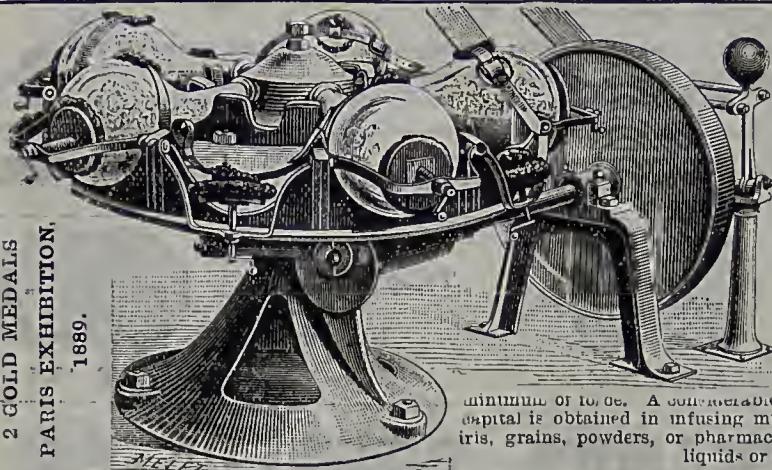
For further particulars see Illustrated Price List of Dispensing and other Bottles, which will be sent on application.



BOXES

AUSTIN & CO., 8 GREVILLE ST., HATTON GARDEN, LONDON, E.C.

Steam Works, 2 Printer's Buildings, Broad Yard, Turnmill Street, London,
and Ring Factory, Clonakilty, County Cork.



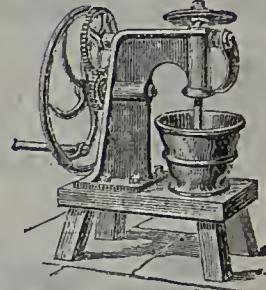
2 GOLD MEDALS
PARIS EXHIBITION,
1889.

This machine is designed for 10 or 15 bottles, each containing about 15 litres, as required.

BEYER FRERES,
16 & 18 RUE DE LORRAINE,
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NEW AGITATING MACHINE

For macerating and exhausting raw materials in infusion with alcohol, producing 150,000 movements per day to each metal receptacle, with a minimum of 10,000. A considerable economy of time, labour, and capital is obtained in infusing musk, amber, benjamin, civitte, iris, grains, powders, or pharmaceutical products treated with liquids or ether.



MORTAR MILL. HAND POWER.



Sole Licensees for Manufacture and Sale of McFerran's Improved Automatic Machinery for Making
COMPRESSED TABLETS
Of various shapes and sizes, from 1 gr. upwards.
EXPERTS sent to fix and start Machines. Write for particulars and prices.
CAPSULES FOR MOULD MAKING. Machines Manufactured to Contract for Inventors & Merchants.



'RAPID' SIFTER & MIXER

Reduces lumpy powders, sifts and mixes faster and makes a more perfect blend than any Machine in the Market.

Send for full particulars to

WM. GARDNER,
ENGINEER, &c.,
GLOUCESTER.

FOR HAND OR POWER Capacities, from 15 to 300 lbs. at one mixing.

DISPENSING BOTTLES & PHIALS.

We beg to call attention to the following GREATLY REDUCED PRICES:—

CLEAR BLUE TINTED, Plain or Graduated—	3 and 4	6 and 8	12	16	ounces.
	7/6	8/6	11/6	16/-	per gross.

THE NEW CRYSTAL BLUE TINTED, Handsome Colour & Clear Glass—

3 and 4	6 and 8	12	16	ounces.
9/-	10/-	14/-	18/-	p r gross.

All other kinds and sizes equally low. Please write for prices of any size required.

I. ISAACS & CO.

GLASS BOTTLE MANUFACTURERS.

25 FRANCIS ST., TOTTENHAM COURT ROAD,
LONDON.

BANKERS: LONDON AND WESTMINSTER BANK.

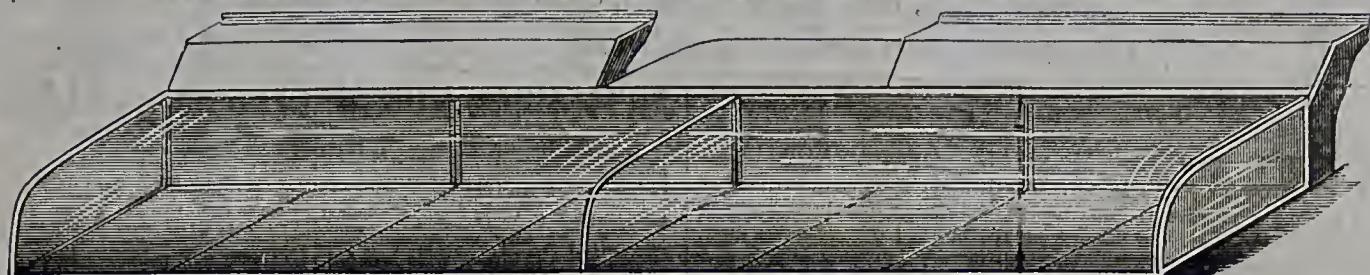
ESTABLISHED UPWARDS OF 50 YEARS.

JOHN HOLROYD & CO., LTD.

Engineers, Tool Makers, and Machinists,
TOMLINSON STREET WORKS,

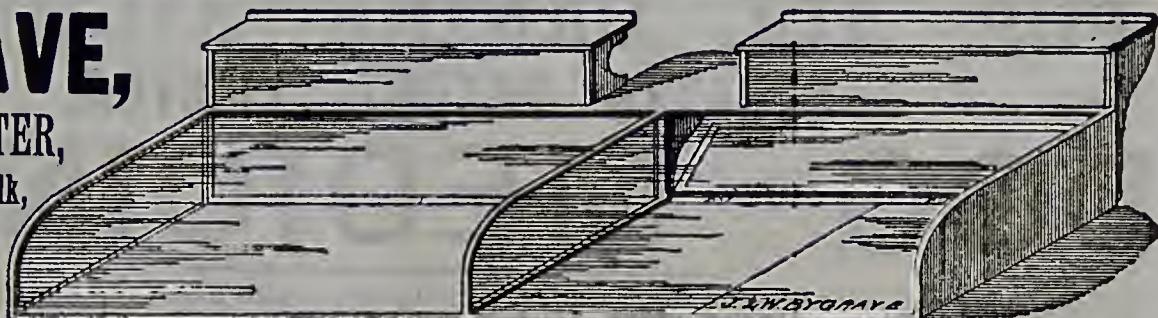
HULME, MANCHESTER.

ELKANAH NATALI
(Established 20 Years),
SHOW CASE MAKER & SHOP FITTER
MAKE MY OWN, AND WORK GUARANTEED. HUNDREDS OF TESTIMONIALS AND REFERENCES.



207 Old Street (Shoreditch End), LONDON. Workshops—Henson Street, E.C. (Only Addresses
 No connection with any other house of the same name. Please address in full.)

BYGRAVE,
 SHOP FITTER,
 111 Shepherdess Walk,
 CITY ROAD,
 LONDON, N.

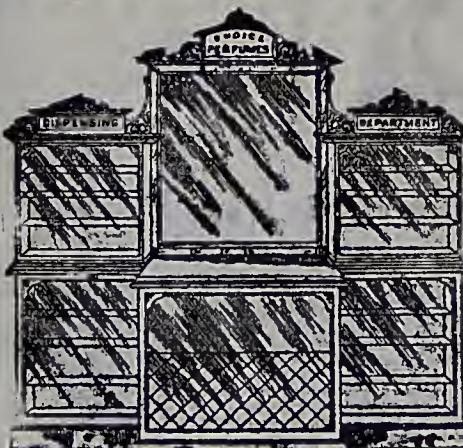


Bent-top plate-glass Counter Showcase, in French polished mahogany, or ebonized, with two upright mirror plate-glass fronted shelves, and table in centre for serving over, and mahogany falls at back lined with mirror plate glass, inside fitted with crimson velvet trays—if 5 ft. long, 18 in. wide, 8 in. high (total height 13 in.), £5 10s.; 5 per cent. off for cash.

"THE CHEMIST" DISPENSING COUNTER.

8 feet long by 2 feet wide .. £24
 If the Dispensing Screen only, £12

This handsome Dispensing Counter is manufactured in Spanish mahogany, and of the best workmanship, so that it will stand any climate. The counter has a solid mahogany top, and plate-glass case front. The centre part fitted to take sponge. A mahogany screen on top, consisting of two plate-glass cases, with shelves inside, and large plate-glass mirror in the centre, and three glass tablets with gold writing in ornamental mahogany carved work. The back of screen fitted with small shelves and a glass poison cupboard. The inside of counter fitted with strong counter drawers, label and cork drawer, open shelves, &c.



NOTICE TO THE TRADE.

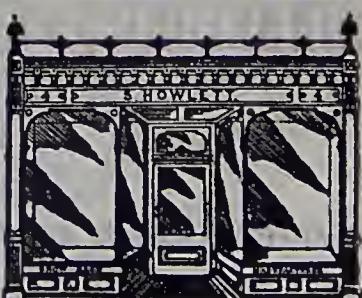
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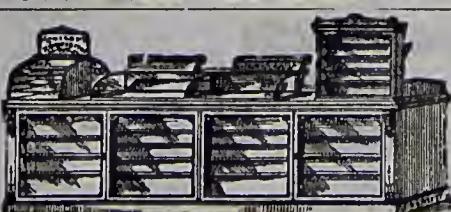
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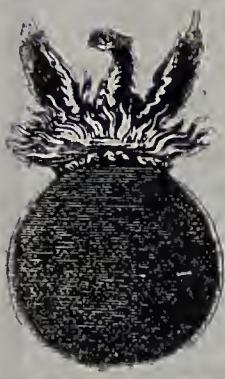
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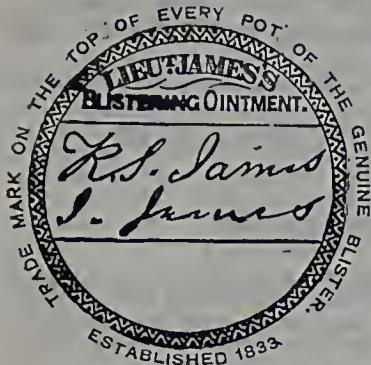
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For producing Local Anæsthesia.
In 4-oz., 10-oz., and 20-oz. Stoppered Bottles, 2s., 4s., and 7s.

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For promoting the Healing of Wounds by the first intention.
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CHARCOAL CAPSULES
Containing Pure Vegetable Ivory Charcoal.
In Boxes, 2s. 6d. each.

OXFORD S. 147

REFERENCE TABLE.

A SCIENTIFIC CLASSIFICATION OF SOAPS.

BOILED SOAPs. <small>(Made at or above 212° F.)</small>	{	HARD SOAP <small>(Soda).</small>	}	RESIN. <small>Yellow. Primrose. Transparent.</small>	}	ALKALINE <small>(made Sine Spirit).</small>	}	<small>Made at low temper- ature from cheap fats, sugar, and strong lyes.</small>		
		CURD <small>(Tallow).</small>		<small>Remelted and milled. Medicated.</small>		SPIRIT <small>(Methylated).</small>		<small>Usually Yellow Kitchen Soap treated with methylated spirit, sugar, &c. (Rarely contain glycerine.)</small>		
COLD PROCESS SOAP. <small>(Made below boil- ing-point.)</small>	{	MOTTLED CASTILE.	}	<small>Coloured with iron, watered, and heavily salted.</small>						
		BROWN WINDSOR.		<small>Factory floor scrapings. Colour due to bad fats and brown ochre.</small>						
SOFT SOAP <small>(Potash).</small>	{	SCOURING SOAP. <small>Scouring Soap. Shaving Cream.</small>	}							
		SODA POTASH <small>(Hard).</small>	<small>Liquid Soaps. Shaving Soaps. Some Toilet Soaps.</small>							

"VINOLIA" SHAVING SOAP

"VINOLIA" SOAP.

"'Vinolia' Soap is of unquestionable excellence, and is much in favour with the profession."—

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"*VINOLIA*". *CREAM.* (*A Plastic Emollient Cream for the Skin in Health and Disease; for Eczema, Roughness, Chaps, &c.*), 1s. 9d., 3s. 6d., and 6s. per box.

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